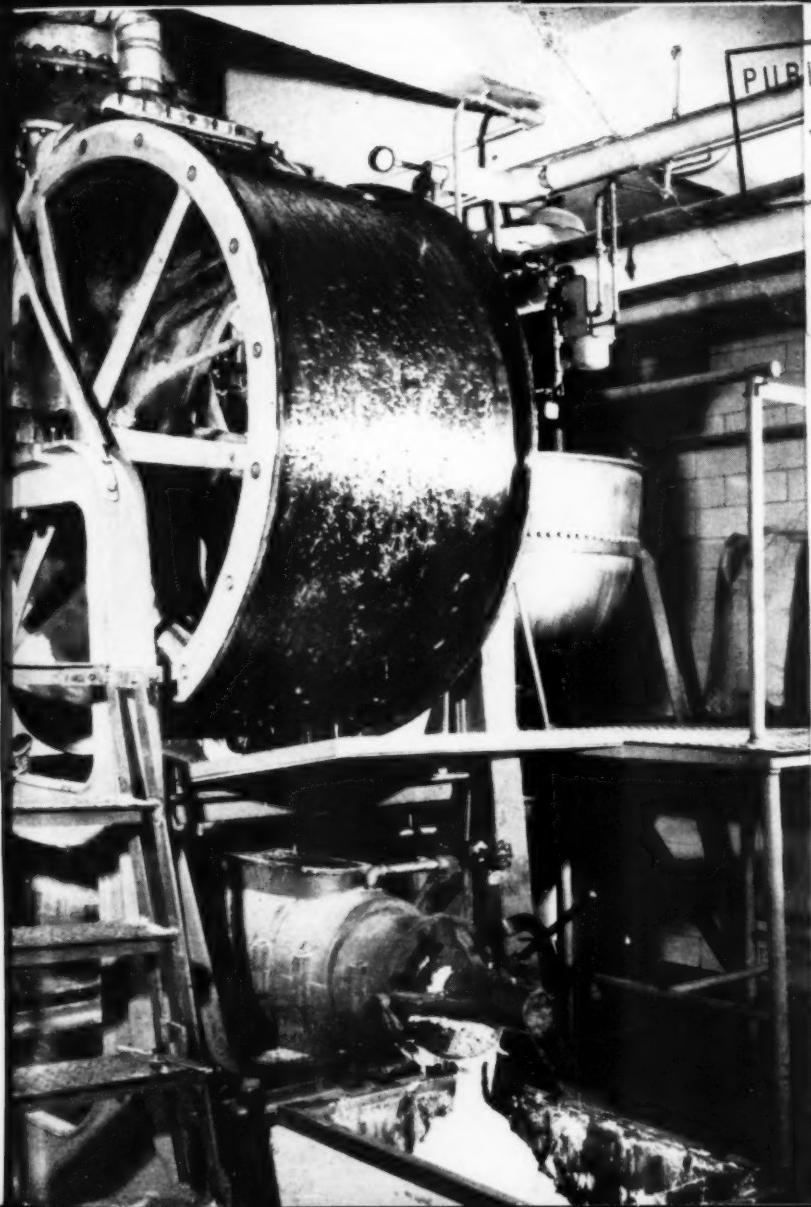


CHNOLOGY DEPT.



NEER SPECIALIZED PUBLICATION FOR CONFECTIONERY MANUFACTURERS



PUBLIC LIBRARY  
JAN 27 1952  
DETROIT

The Long Green: There's  
Money in the Odor-killing  
Business—via Chlorophyll

Modern Chocolate Tempering,  
A Survey of Present Methods  
And Ideas for Improvement

Systematic Production:  
The Continuous Fondant  
Production Technique

JANUARY  
1952

V.32

1952

R

RENSSELAER PLANT  
where B.B.I-S. Vanillin, Trides, Vitamin Feed Concentrates and U. S. P. Vitamins are manufactured.

CINCINNATI PLANT  
where Ceyline, Kaccel, Parkeet Certified Food Colors and Vitamin Feed Concentrates are manufactured.

WATERTOWN, PA. PLANT  
where Fosol, the Original Quaternary Ammonium Compound is compounded and produced.

WINDSOR, ONTARIO PLANT  
Canadian manufacturing and distribution headquarters for Sterwin products.

STERLING INSTITUTE, New York, N. Y.  
One of the largest and most modern research centers in the country. The center is engaged in the development of new drugs and pharmaceuticals.

STERLING DRUG COMPANY, New York, N. Y.  
The oldest and most complete drug company in the country, manufacturing and distributing a wide variety of pharmaceuticals and other products.

HOME OFFICE  
located in Sterling Drug's forty-three story skyscraper in the heart of New York City . . . one block from Times Square.

# Sterwin

Serves Food, Feed and  
Pharmaceutical Industries  
with  
**MODERN RESEARCH**  
**QUALITY PRODUCTS**  
**DEPENDABLE SUPPLY**

VITAMINS • ENRICHMENT CONCENTRATES  
FLOUR BLEACHING AND MATURING AGENTS  
VANILLIN • VITAMIN FEED FORMULAS  
CERTIFIED FOOD COLORS • SANITIZING AGENTS

*Sterwin Chemicals, Inc.*

Subsidiary of Sterling Drug Inc.

1450 Broadway, New York 18, N. Y.

BRANCH OFFICES: Atlanta, Boston, Buffalo, Chicago, Dallas, Kansas City, Mo., Los Angeles, Minneapolis, Portland, Ore., St. Louis

Tech.

es

TES  
NTS  
LAS  
NTS

, Dallas,  
St. Louis.

for

• ALVA FLAVORS • ALVA FLAVORS • ALVA FLAVORS • ALVA FLAVORS •

Aesthetic... *Yes!*  
BUT TECHNICALLY RIGHT TOO



The peak in flavor perfection! . . . Yet Alva flavors are soundly designed by an organization of capable food chemists whose knowledge, experience and facilities are unmatched. An Alva flavor is perfection in flavor and technically right in the product for which it is recommended.

You should examine the new

LEMON — LIME — ORANGE

imitation confectionery flavors developed from new materials that are remarkable for imparting superbly natural flavor to finished confections.

Write for the big complete ALVA catalog and see ALVA Flavors' complete line in every quality, strength and price class.

VAN AMERINGEN-HAEBLER, INC.

521 WEST 57TH STREET  
NEW YORK 19, N. Y.

• ALVA FLAVORS • ALVA FLAVORS

• ALVA FLAVORS •

# YOU CAN MAKE MINE MINT!



... NOT just any mint, mind you,  
but rather the kind that leaves a taste  
that is nice and clean and coolly refreshing to the mouth.  
Ah, but there's a world of difference in mints!  
They're like the little girl in the nursery rhyme  
who, "when she was good, she was very, very good,  
but when she was bad, she was horrid."  
And that's the way it is with mints. . . .  
they can be very, very good—and many of them are—  
or they can be plainly and simply horrid!  
That's why, if you're at all concerned about repeat sales,  
you should flavor your mint confection  
with carefully selected oils  
of unquestioned origin and quality.  
Pound for pound, they'll probably cost a trifle more,  
but in the final accounting, where profits are really made,  
you'll find you can use less flavor  
and still produce *tastier* candies. . . .  
and with *tastier* candies, *more* sales.  
That's why it will always pay you to use mint oils  
backed up by the unqualified guarantee of FRITZSCHE. . . .

*A FIRST NAME IN FLAVORS SINCE 1871.*

Write for FREE handy Flavor Selector and Cost Calculator, also catalog . . . . on your letterhead, please.

**FRITZSCHE**  
*Brothers, Inc.*

Established 1871



PORt AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N.Y.

BRANCH OFFICES and STOCKS: Atlanta, Georgia, Boston, Massachusetts, \*Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, \*Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, \*St. Louis, Missouri, \*Toronto, Canada and \*Mexico, D. F. FACTORY: Clifton, N.J.



# The Manufacturing Confectioner

READ WHEREVER CANDY IS MADE

JANUARY 1952  
Vol. XXXII No. 1

**EARL R. ALLURED**  
**FOUNDER**

**EDITOR AND PUBLISHER**

P. W. Allured

**TECHNICAL EDITOR**

Wesley H. Childs

**ASSOCIATE EDITOR**

C. F. Roberts Jr.

**NEW YORK STAFF WRITER**

Clara Baldwin

**EASTERN MANAGER**

Stanley E. Allured

**CIRCULATION DIRECTOR**

James W. Allured

L. M. Weybridge  
London, England, 21B Salisbury Road  
Hove, Sussex

**ADVERTISING OFFICES**

Chicago 6, 9 South Clinton  
Allen R. Allured, Franklin 2-6369

New York 18, 303 W. 42nd St.  
Stanley E. Allured, Circle 6-6456

San Francisco 4, Mills Bldg.  
Duncan A. Scott & Co.,  
Garfield 1-7950

Los Angeles 5, 2978 Wilshire Blvd.  
Duncan A. Scott & Co., Dunkirk 8-4151

London, England, Prospect House  
Heath Street, N. W. 3  
M. G. Reade

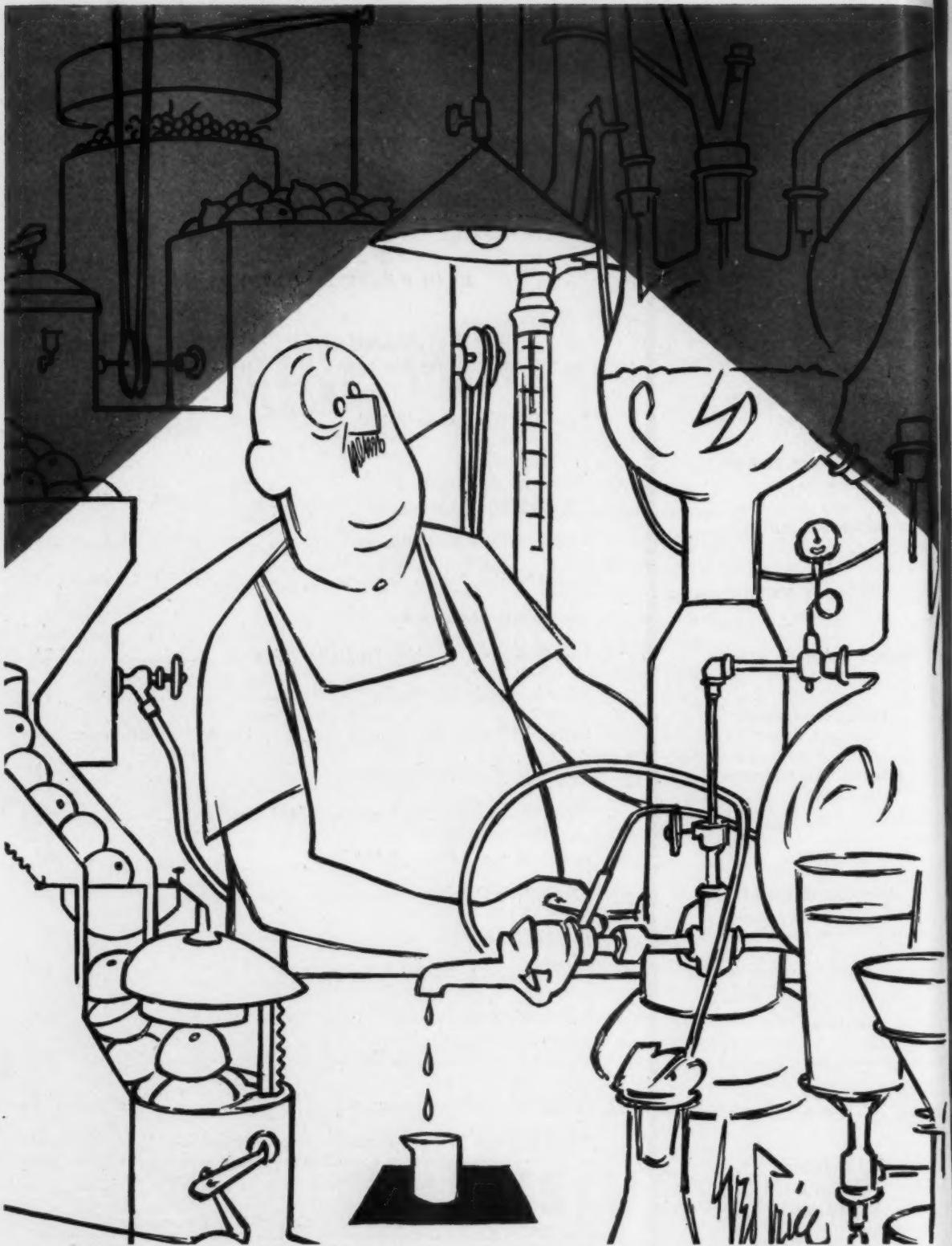


Pioneer Specialized Publication for Confectionery Manufacturers Plant Management, Production methods, Materials, Equipment, Purchasing Sales, Merchandising.

From The Desk of the Publisher.....	7
25 Years Ago.....	10
The Long Green.....	W. H. Childs 14
Modern Chocolate Tempering.....	J. Koch 16
Candy Making for the Beginner.....	Alfred E. Leighton 19
Conventions—Meetings.....	22
The Continuous Fondant Production Line.....	24
What's New in Candy Equipment.....	26
Package Printing Technique.....	Dr. A. C. Zettlemoyer 39
PMCA Conference Program.....	42
Candy Clinic—Holiday Packages; Hard Candies.....	43
Distribution • Sales • Advertising .....	47
Confectioners' Briefs .....	50
Association News.....	52
Confectionery Brokers.....	53
Supply Field News.....	54
The Clearing House: classified ads.....	56
Advertisers' Index.....	58

**COVER:** Fresh fondant discharges from the beater as the syrup cools overhead on the cooling drum before entering the catch pan (see story on page 24).

Published Monthly on the 5th by The Manufacturing Confectioner Publishing Company, publishers of *The Manufacturing Confectioner*—The Blue Book—*The Candy Buyers' Directory*—*Candy Merchandising*. Executive offices: 9 South Clinton Street, Chicago 6, Illinois. Telephone FRanklin 2-6369. Eastern offices: 303 West 42nd Street, New York City 18, N. Y., Telephone Circle 6-6456. Publication Office: Pontiac, Illinois. Copyright, 1951, Prudence W. Allured. All rights reserved. Subscription price: One Year \$3.00, Two years, \$5.00. Per copy, 35c, except September "Purchasing Executive Issue"; \$2.00. In ordering change of address, give both old and new address. Entered as Second Class Matter, April 20, 1939, at the Post Office at Pontiac, Illinois, under the Act of March 3, 1897. Member: National Confectioner's Ass'n, Western Confectionery Salesmen's Ass'n, National Candy Wholesalers Ass'n, Audit Bureau of Circulations. Foreign Subscriptions: One Year, \$4.00. Two years, \$7.00. Canadian Subscriptions: same as U. S.



Got a Flavor or Color Problem?

call H. KOHNSTAMM & CO., INC. • 89 Park Place, New York 7 • 11-13 East Illinois St., Chicago 11 • 4735 District Blvd., Los Angeles 11

# From the Desk of the Publisher

WE ARE traveling along life's highway. A whistle blows and the light turns red. Father Time has halted traffic. We glance in the rear view mirror.

The twelve milestones of 1951 are clearly reflected. Each issue of THE MANUFACTURING CONFECTIONER stands as an ever-lasting testimonial to the Founder. His promise to the confectionery industry has been kept.

Today, as before, THE MANUFACTURING CONFECTIONER is designed and formulated for the candy manufacturer. It is the only periodical so specialized. The wide scope of coverage was recorded in the annual index last month.

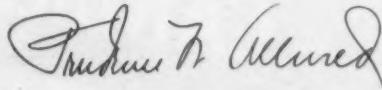
Sign posts such as, "Candy in Your Diet," "Dust in Your Candy Plant," "Modernizing Your Warehouse," "Is Your Plant Boiler Safe?" and "Your Buying Guide," are prominently displayed.

THE MANUFACTURING CONFECTIONER is *Your* magazine. The Candy Clinic, Candy Packaging, Candy Equipment and The Manufacturing Retailer are *Yours*. *Your* Letters to the Editor please me greatly although it is impossible to print them all. The conventions are reported in detail so that, were you unable to attend in person, you may do so at your leisure.

The light is green. We enter the country-side of 1952. We shall meet no commonplace scenery as we continue onward. But we shall expect to make new friends and renew acquaintance with old ones. Mr. J. Koch, a newcomer in 1951, will continue with us in '52. Mr. Frank Buese will continue his instructive series on cost control and Mr. Alfred Leighton will conclude his interesting series on candy making. We shall continue presenting provocative articles, an unusually good one appears in this issue. Though our efforts may seem puny when compared to the task of mass producing Delicious Food, I can assure you that the highway sometimes gets a little bumpy.

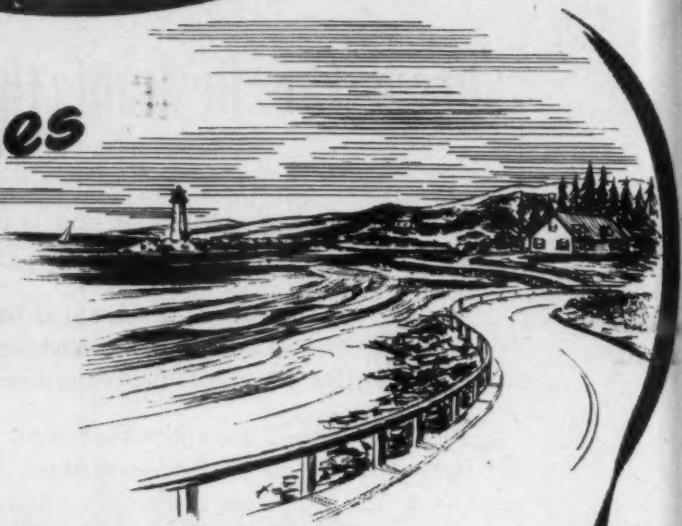
Well, this is our first stop, Volume 32, Number 1. Let me know how you like it, will you?

Happy New Year,



Publisher-President

what candies  
sell best in  
**MAINE?**



## "ALMOND CANDIES same as everywhere!"

You know the saying, "As Maine goes . . . Well, Maine *really* goes for almond candies, same as the rest of the country. Have you joined the profit-minded candy makers who consistently capitalize on the public preference for fast-selling candies made with Blue Diamond almonds?

"Blue Diamonds" give you the key to lower handling costs in your plant. Careful hand-picking plus exclusive photo-electric sorting

assure uniform quality, free from foreign particles or bitters. New cold storage facilities handling up to 8,000,000 pounds shelled assure steady year-round supplies.

So let's talk almonds. Write for your free copy of new 16-page "Formulas for Candy-makers", with actual size color photos of leading varieties, sizes and grades. *Let's talk about selling more candy!*

The nation's  
favorite candies  
are **ALMOND  
CANDIES**



### BLUE DIAMOND ALMONDS

CALIFORNIA ALMOND GROWERS EXCHANGE ... Sacramento, Calif.  
Sales Offices: 100 Hudson St., New York 13, and 221 N. La Salle, Chicago 1

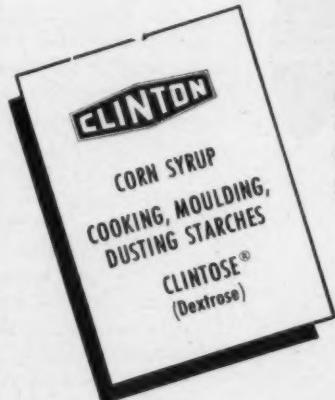


# Guaranteed QUALITY



## When you use Clinton's SYRUPS and STARCHES

Clinton's laboratory tested syrups and starches are scientifically manufactured to insure you unvarying uniformity. Clinton's staff of highly trained technicians is constantly checking these products to assure top quality, batch after batch.



- Our Sales Service Department is for your convenience. You'll find it mighty helpful and profitable in solving your technical problems. Write or call without obligation.

*Tops*  
FOR CONFECTIONERS  
COAST-TO-COAST

**CLINTON FOODS INC.**  
CLINTON, IOWA



# 25 Years Ago

**I**N the January issue of The MANUFACTURING CONFECTIONER . . .

The Keynote of the issue was "How to Modernize Your Candy Department". Cooking, humidity control, and color and flavor uniformity were thoroughly discussed.

The publisher could claim "this first issue of the new year starts off

with the biggest and most profitable issue we ever published—by 40 per cent . . ." and announce the birth of "Allen Robert Allured, Brand New Advertising Manager of The MANUFACTURING CONFECTIONER . . ."

Reports on the hard candy business from various sections of the country were varied. The Pacific

Coast manufacturers "shake their heads discouragingly". The Southern California "manufacturers would fasten the blame on those of the San Francisco district and the San Francisco folk would point accusing fingers at the 'Northwestern crowd.'" Cause for all this buck-passing was that "prices were quoted in September on the basis of \$5.70 sugar, but long before Christmas everybody was filling orders with candies made with \$6.40 sugar.

The hard candy business in the Minneapolis area was found "promising." The Cunningham-LeBaron Company, for instance, began making hard candy "three years ago and has already enlarged five times in size and will double its capacity in May." A new trend in the area was noted with the forecast that "the time is coming when there will be a cheaper container for dispensing hard candies than the (bulk) glass jar. When these candies are sold from bulk and put in a folding box they naturally gum up right away. He (a Mr. Qualley) is trying out a small cardboard package that looks something like a small tub. The top fits on like the cap in a milk bottle. He keeps the package airtight and the cap is easily replaced after the candy is taken out."

The Candy Critic, fore-runner of the present Candy Clinic, in analysing the quality of hard candy on the New York market, found "the workmanship of most of the candy was excellent, indicating that our candy makers know their jobs and take pride in doing them well." In closing he noted that "the few samples of imported candy picked up . . . did not show up well against the domestic article. The American maker of hard candy has nothing to fear from English competition."

Our New Year's Editorial noted that "a new era has descended upon the candy industry, an era of scientific progress and of mutual understanding."

Another editorial, titled "The \$50,000,000 Cocoa Swindle", which was due to arouse quite a flurry during the next few months, denounced "the beginning of one of the most audacious cornering attempts in the history of modern marketing" which was forcing the "chocolate industry . . . to pay \$50,000,000 more for their supply of cocoa this year than they paid last year."



Take steps NOW to add new sales appeal to your products with . . .



**PEACOCK BRAND  
CERTIFIED FOOD COLORS**

MANUFACTURED AND DISTRIBUTED BY WM. J. STANGE CO.,  
CHICAGO 12, ILLINOIS      OAKLAND 21, CALIFORNIA

Also Mfrg's Stange Cream-of-Spice Seasonings

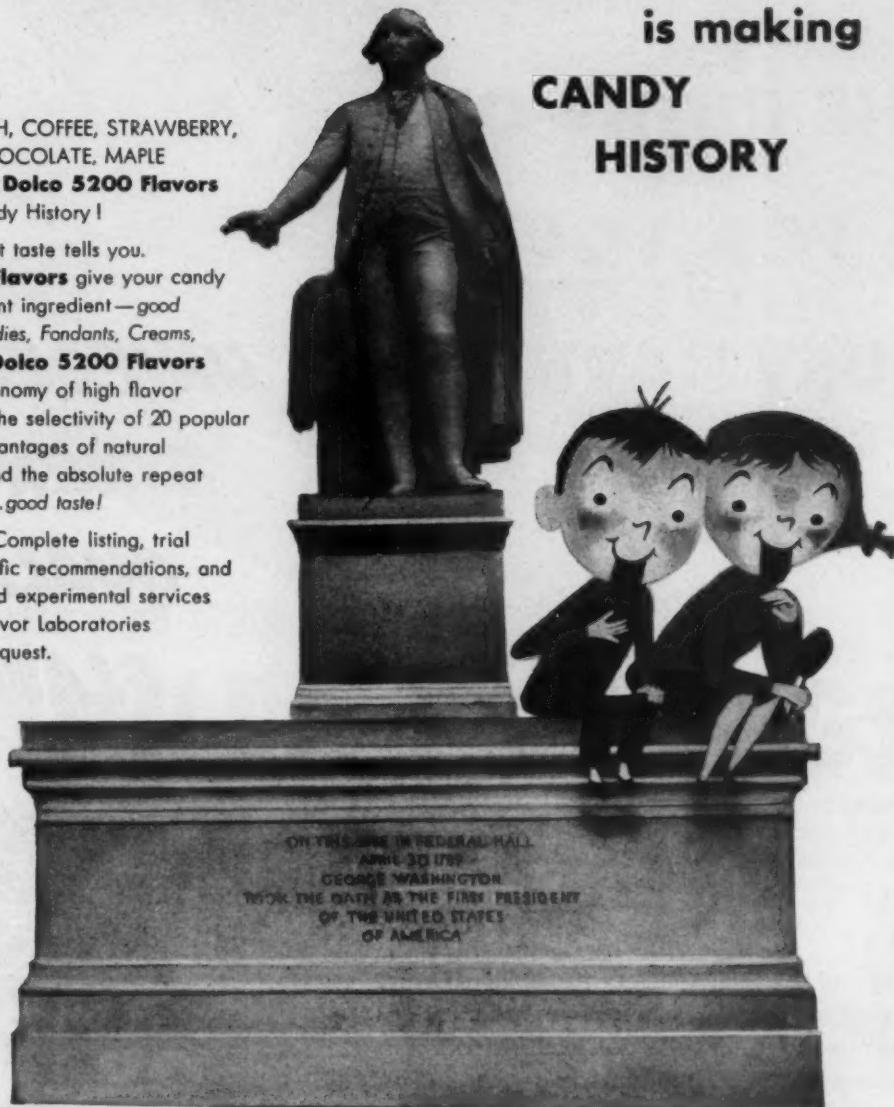
their  
thern  
l fas-  
San  
Fran-  
find-  
ed."  
was  
mber  
long  
s fill-  
with  
  
the  
omis-  
Com-  
aking  
l has  
e and  
." A  
with  
ning  
tain-  
than  
these  
I put  
gum  
(le) y  
pack-  
small  
in a  
air-  
aced

**the DOLCO 5200 FLAVOR LINE  
is making  
CANDY  
HISTORY**

BUTTERSCOTCH, COFFEE, STRAWBERRY,  
RASPBERRY, CHOCOLATE, MAPLE  
and 14 others... **Dolco 5200 Flavors**  
are making Candy History!

Why?—The first taste tells you.  
**Dolco 5200 Flavors** give your candy  
its most important ingredient—good  
taste! Hard Candies, Fondants, Creams,  
Gums, Jellies... **Dolco 5200 Flavors**  
provide the economy of high flavor  
concentration, the selectivity of 20 popular  
flavors, the advantages of natural  
fruit coloring and the absolute repeat  
sales-essential... good taste!

Consult D&O. Complete listing, trial  
quantities, specific recommendations, and  
the advisory and experimental services  
of the D&O Flavor Laboratories  
are yours on request.



**DO DODGE & OLcott, INC.**  
180 Varick Street • New York 14, N. Y.  
SALES OFFICES IN PRINCIPAL CITIES  
ESSENTIAL OILS • AROMATIC CHEMICALS • PERFUME BASES • FLAVOR BASES • VANILLA



# **THE RIGHT OIL FOR YOU**

## **MUST HAVE . . .**

**UNIFORMITY  
STRENGTH  
QUALITY  
FLAVOR**

Thousands of buyers know that Exchange Oil of Orange meets these qualifications consistently. They know that rigid, day-to-day laboratory control, combined with years of experience as the leader in the citrus products field, guarantees that Exchange Oil of Orange will always meet their most critical specifications.

*Distributed in the United States exclusively by*

**FRITZSCHE BROTHERS, INC.** • **DODGE & OLcott, INC.**  
76 Ninth Avenue, New York 11, N.Y. • 180 Varick Street, New York 14, N.Y.



**CALIFORNIA FRUIT GROWERS EXCHANGE**  
PRODUCTS DEPARTMENT, ONTARIO, CALIF.  
PRODUCING PLANT:  
The Exchange Orange Products Co., Ontario, Calif.





*...with these High-Grade*

# VANILLA COATINGS

**MARVEL VANILLA COATING**  
— very finely milled chocolate of dark color and smooth texture . . . "the contrast piece."

**PRINCESS VANILLA COATING**  
— medium dark . . . full chocolate flavor of the fondant type. A bouquet of excellent balance.

**PLAZA VANILLA COATING** — light in color, incomparable for flavor and smoothness . . . adds extra richness to centers.

You discover that fine coatings are *more* than mere coverings when you try Walter Baker's High-Grade Vanilla Coatings. For here is smoothly workable chocolate, created to enhance your finest centers. Here are color, gloss and texture that give your confections a decided competitive edge in "buy-appeal" — plus snap and flavor made to win friends and influence customers from the first tempting bite.

Let your own comparison prove why the finest vanilla coatings in sight — in taste — are Walter Baker's!

**A Complete Range in Flavors, Colors, Prices — Including:**

\***Milk Coatings** — Masterpiece, Mayflower, Bourndale and other top-grade milk coatings that challenge comparison!

\***Vanilla Coatings** — the above and

\*Samples on request

*The First Name in Chocolate . . . The Finest Name in Service*



# WALTER BAKER CHOCOLATE AND COCOA

Division of General Foods Corporation, Dorchester 24, Mass.

Sales offices in Chicago, Cleveland, Detroit, Los Angeles, New York, Philadelphia. Brokers in all principal cities.

"My Success Depends on Yours!"

... says Arthur E. Fest of New York — one of the Walter Baker Chocolate Consultants who serve America's confectionery industry. Like his fellow-consultants, he offers his customers expert technical advice, backed by years of specialized experience in the confectionery field . . . There's a Walter Baker representative nearby, ready to help you in your choice and use of America's finest coatings and chocolate liquors.



# The LONG Green, or, How To Make a Fast Buck

by WESLEY H. CHILDS  
TECHNICAL EDITOR  
THE MANUFACTURING CONFECTIONER

**T**HE "long green" refers to chlorophyll. This natural wonder has put folding money in the pockets of many go-getters. Perhaps a little of the miracle-working substance may be used in some of your candies to "sweeten" your profits.

"To make a fast buck," requires considerable enterprise, more than a modicum of luck, and a willingness to "take a chance." Merely originate a new candy piece, perfect it, and turn your salesmen out in a furious advertising storm, and you will have "it made" in a little while.

Some chewing gum manufacturers grew tired of humdrum production of caramel-color-like stick gum. Now, green colored chewing gum is on the counter attracting All Mighty dollars to the world's most musical instrument, the cash register. What is good for the chewing gum magnate may prove equally beneficial to his candy cousin.

Until Paul de Kruif 'refreshed our knowledge of chlorophyll last year, most of us had stored the facts we had learned in school about the green pigment 'way back in our minds. But we lifted our eyebrows when we read, "Americans spend 50 million dollars per year for body deodorants and mouth washes." Maybe, we glossed over the information that chlorophyll pills can abolish tobacco or alcohol breath.

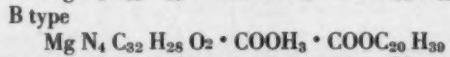
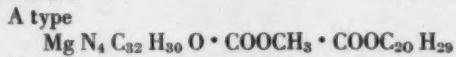
There is really little need to introduce chlorophyll to the elder statesmen in the confectionery industry. No doubt these men recall the days when vegetable colors were commonly used. Coal tar or analine colors, "Certified," did not exist. And among the natural colors, chlorophyll was one of the best.

But this natural product really did not become popularized until about eight years ago when air fresheners appeared on the market. Then, when whispers of wonders in the field of medicine reached our ears and our eyes were attracted by advertisements, deodorant pills started their fight against America's greatest enemy, Halitosis. More recently, the "long green" has been added to tooth paste.

According to a very recent popular article written by Herb Bailey<sup>2</sup>, chlorophyll in a dentifrice literally burns up the odors produced by decay. It changes their chemical structure and halts the decay itself.

Chlorophyll is the green colored pigment found in plants. It may be considered as a catalyst, enabling the plant to manufacture or produce carbohydrates in the presence of light. The process is called photosynthesis<sup>3</sup>. Chlorophyll and photosynthesis are deemed so important that long term research projects are being conducted at Stanford University and Antioch College.

Chlorophyll occurs in plants in two forms, A and B. A is present to about three times the extent of B. In the dry state, type A is blue-black while type B is green-black. In solution, type A is blue-green while type B is yellow-green. The chemical formulas are complicated but may be written as<sup>4</sup>:



The basic nucleus of the natural pigments, chlorophyll in plants and hemin (present in blood) in animals is porphine<sup>5</sup>. Magnesium occurs in chlorophyll while iron is present in hemin. Hence, chlorophyll might be considered to be the life blood of the vegetable kingdom. The two types, A and B, of chlorophyll are present in the commercial products. Separation is expensive and unnecessary. In the chloroplasts of green leaves, the two types of chlorophylls are combined with xanthophyll, carotene, and protein, forming a complex called chloroplastin. This contains 69% protein, 21% lipids and 8% of the pigments.<sup>6</sup>

It may be of interest to note that the  $C_{20}\ H_{39}$  group (see the formula) is called phytol. This is a "building block" for the chemist in the synthesis of Vitamin E. Carotene, found with chlorophyll, is, of course, provitamin A. Thus, chemically chlorophyll is an intriguing product.<sup>4</sup>

Plants contain this "long green" but economics determines the kinds cultivated or harvested. Spinach, grass, nettles, or alfalfa may be used. Basically, the chlorophylls are separated by extraction methods using either cold or

boiling solvents, such as, benzene, acetone, petroleum distillates or trichlorethylene. Then the solvent is evaporated and the crude pigment is obtained. The crudes are refined because some vegetable oils or waxes or other impurities may be present.<sup>7</sup> Oil-soluble and water-soluble chlorophylls are produced in at least seven different grades. The water-soluble pigment is made by saponification. Caustic potash combines with oil to form soap which when removed, leaves chlorophyll in the water phase.

As both the oil and water-soluble chlorophylls tend to bleach out upon exposure to sunlight, steps are sometimes taken to prepare chlorophyll in a more stable form. This may be accomplished by substituting copper, iron, or nickel for the magnesium present in the original molecule (see the formula). However, iron or nickel are used when chlorophyll is marketed to food users.

Research has shown that chlorophyll has at least five uses which may be summarized as<sup>4</sup>:

1. A non-toxic vegetable dye,
2. A blood-building compound to combat anemias,
3. An aid in stimulating wound-healing,
4. A bacteriostatic agent to combat infection, and
5. A deodorizing agent.

Nutritionists have long attacked candy. Candies have been fortified with yeast, vitamins and minerals. Proteins have been added. Dr. G. W. Rapp<sup>8</sup> has just recently presented his observations on "Candy and Your Diet." Quite likely, more will be written about the nutritional short-comings of candy. Candy must be a convenient whipping post. But no doubt there is room for improvements to be made.

Though chlorophyll will not add to the nutritional properties of candy, nevertheless, there are some varieties of candy in which it could wisely be used. There need be no fear that chlorophyll will be included in every candy formula. We like white, red, brown and other colored pieces too well to be content with merely green colored candies.

Candies which could advisedly use chlorophyll are mints and cough drops. Some astute manufacturer used to advertise that his mints 'took your breath away.' With chlorophyll as an ingredient, that slogan would be reinforced! Green mints or cough drops should be readily accepted by the public.

What quantities of chlorophyll should be used? Studies<sup>9</sup> on the use of deodorant pills indicate that a 100 milligram chlorophyll tablet gave relief from body odors for several hours after being taken. About an hour was required for effective absorption of the medicine before any relief was noted. Tooth pastes studied<sup>2</sup> contained 1/10 of one percent of chlorophyll.

Which type of chlorophyll should be used? Only the water-soluble product. Chlorophyll is not subject to the Coal Tar Color Regulations because it is a natural color<sup>10</sup>. This means that the producer has the responsibility of determining the purity of his product to be sure that it is free from lead, zinc, arsenic, copper or other deleterious substances within the meaning of the F.D. and C. act.

How is chlorophyll sold? There are several grades, as mentioned previously, of the water and oil soluble types. These may be purchased according to the chlorophyll content.

You may find listings of chlorophyll in the catalogs

Wesley H. Childs, Technical Editor of THE MANUFACTURING CONFECTIONER.



of flavor and color suppliers. A recent quotation for 4% potassium magnesium, food or pharmaceutical grade of chlorophyll was \$3.75 per pound<sup>11</sup>.

Some criticism may be presented (Editor's Note—Please write us your comments on this article), (Author's Note—Do not dare to offer anything but praise), to the effect that there is no reason to switch from the candy to the patent medicine business. Now, take it easy, lots of candy cough drops are on the market and are equal in value to many patent medicines advertised for cough remedies. Candy cough drops are not advertised as cough remedies, they may relieve common coughs. Coughing individuals are often afflicted with catarrh which may cause fetid breath. Chlorophyll-containing candy cough drops should alleviate this embarrassing condition.

To summarize, the 'fast bucks' have been rolling into the tills of the deodorant and tooth paste peddlers because they are aggressive and have concentrated their thoughts on the 'long green.' Some information has been presented about chlorophyll. The idea of making special candies for your 'stinky' customers has been presented. Are you going to 'sweeten' your profits, the breath of the trade, and turn your rivals green with envy by incorporating the miracle product chlorophyll, in your candies?

#### References

1. Paul de Kruif, *Nature's Deodorant*, Reader's Digest, August, 1950.
2. Herb Bailey, *How to Keep From Getting False Teeth*, Better Homes and Gardens, Vol. 29, No. 15 (1951).
3. M. W. de Laubenfels, *Pageant of Life Science*, 4th Ed., 1949.
4. Dr. Walter H. Eddy, *Chlorophyll in 1950*.
5. A. Lowy and B. Harrow, *Introduction to Organic Chemistry*, 6th Ed., 1945.
6. Felix Haurowitz, *Progress in Biochemistry*, 1950.
7. ...., *Chlorophyll Finds New Uses*, Manufacturing Chemist, Vol. 22, No. 8 (1951).
8. Dr. G. W. Rapp, *Candy and Your Diet*, THE MANUFACTURING CONFECTIONER, Vol. 31, No. 11 (1951).
9. Milton A. Lesser, *Chlorophyll as a Deodorant*, Drug and Cosmetic Industry, Vol. 68, No. 1 (1951).
10. Arthur D. Herrick, *Food Regulation and Compliance*, 1947.
11. Chem. & Eng. News, Vol. 29, No. 46 (1951).

# Modern Chocolate Tempering

*A brief survey of present tempering methods  
with suggestions for possible improvement*

By J. KOCH

IT IS now fairly universally accepted that the process of tempering chocolate is one of securing crystallisation of some of the higher melting fractions of the fat, prior to solidifying the main bulk of the chocolate; practical experience suggests also that these higher fractions must be set and dispersed through the masse, by stirring before the final setting is permitted. We have however practically no information as to what numerical proportions of the total fat are concerned, and we still have to judge very largely by the appearance and feel of the chocolate to say whether it is adequately tempered or not. For a given set of circumstances, the temperature of the masse has been proved to be a very good guide, but it is important not to lose sight of the proviso, 'for a given set of circumstances'.

There has long been controversy as to the relative merits of tempering in large kettles or small ones, and in recent years the introduction of the high speed automatic tempering machine has further complicated the issue. The low temperature, high frequency electrical system of melting chocolate has also been advocated as a short cut to temper, but there seems to be little doubt that it can only reproduce the temper that was given to the block when it was first set, and not change it for the better; thermodynamically there is a gain, as normal melting requires heating the chocolate to some 30°F above tempering temperature and cooling it down again, but the cost per B.Th.U. of common heating and cooling is so much less than the cost per B.Th.U. of H.F. heating, that the chances of a real saving resulting from this process are usually slight, and the restriction that the original temper cannot be improved upon puts it outside the scope of this article.

It is clearly becoming very important to be able to assess the factors governing temper somewhat more precisely, if we are to get full value out of the very fine tempering equipment which is available nowadays. Temperature is still apparently the only relevant physical characteristic of chocolate which can be measured accurately, and even though it does not tell us the whole story, it seems worthwhile reviewing the circumstances which appear to cause variations in the tempering temperature. For simplicity's sake, the actual temperatures

quoted here will be applicable only to pure cocoa butter mixes, and not for instance to milk chocolates, which are complicated for tempering purposes by the presence of milk fats; for absolute accuracy, it would probably also be necessary to specify the source of the cocoa butter, as there are, almost certainly, essential, even if slight, differences between cocoa butters extracted from different crops of beans, or from different parts of the bean. Their influence on tempering appears however to be slight by comparison with the effects of even traces of other fats.

Firstly, the evidence that the tempering temperature varies with the fat content of the mix is clear. If we imagine various fat content mixes being tempered in an ordinary kettle of about 6 cwt capacity, with a time of cooling of from 25 to 45 minutes, the resultant tempering temperatures are well known to be approximately as follows:

Pure cocoa butter (i.e. 100% fat content), about 75°F.

Ground nib (55% fat content), about 82°F.

Chocolates (32% to 40% fat content), about 86-90°F.

If a graph is made of these temperatures, we see that the tempering temperature rises as the fat content is reduced; it has also been shown from experiments with cocoa powder that the relationship extends over an even wider range and, as might be expected, the curve trends towards a theoretical infinite tempering temperature at zero fat content. There is insufficient evidence to show whether the curve has any real meaning at temperatures of the order of 120°F and above; it would seem unlikely, since cocoa butter is considered for all practical purposes completely melted at such temperatures. The reality of the relationship up to at least 110°F is however daily demonstrated by the practices of the craftsmen who process these materials.

Secondly, the tempering temperature varies markedly with the rate of cooling. If an average 35% fat content covering chocolate is cooled in a one ton capacity kettle with a cooling time of about 90 minutes, it is tempered at 91°F, or even slightly above; in a half ton capacity kettle, with a cooling time of say 50 minutes, it can be super-cooled to 88-89°F and then reheated to 90°F; in a 3 cwt kettle, with a cooling time of 15 minutes, it can be cooled as low as 86-87°F, though if it is to be held any

length of time, it will probably afterwards be reheated to at least 89°F; in a continuous worm temperer, with a principal cooling time of the order of half a minute or less, it must be supercooled to about 82°F to temper, though it will again be reheated if it is to stand any length of time without loss of fluidity and temper.

The different cooling times usual for various sizes of kettle are of course due to a combination of intensity of stirring and the ratio of cooling surface to weight of chocolate, assuming that cooling water of the same temperature is used in each case; for a middle sized kettle driven at 25-30 r.p.m., the mean heat transfer coefficient is of the order of 16-20 B.Th.U. per sq. ft. of cooling surface per hour per °F temperature difference. The automatic worm temperer however, probably owing to the very intensive mixing that takes place in the worm passages, usually operates with a transfer coefficient of up to ten times this figure. The rate of cooling effect can however, be demonstrated on any kettle by slowing up the rate of cooling with warm water.

From this it would appear that supercooling is merely a means of getting rapid crystallisation of the higher melting fractions, and has no special magical qualities, as is sometimes hinted; however, if dispersion of the high melting fractions through the masse is one of the primary aims of tempering, as was suggested earlier, then it is also probable that the rapid cooler, making use of supercooling and intensive stirring, is likely to be more effective than the slow cooler, as the crystals so formed will certainly be smaller and more numerous. Whilst it is perhaps too early to say positively that the high speed automatic temperer produces the best temper of any, though there are many craftsmen who would support such an assertion, there is no doubt of the consensus of opinion amongst those who have had long experience of both large and small kettles. Even after making allowance for the complications caused by the residual heat capacity and inertia of the metal of a large cooler, and the length of time it takes to empty the chocolate, there is little doubt that experience over years has repeatedly shown the superiority of the small kettle, even though large kettles are frequently installed on grounds of economy in floor space and handling costs; from a purely economic standpoint, of course, the high speed continuous temperer usually offers marked advantages over kettles of any shape or size.

A second practical point of importance that results is the suggestion that if a standard rate of cooling is postulated, with appropriate supercooling and intensity of stirring, then the tempering temperature may be gov-

erned by the fat content of the mix, modified as necessary when ingredients such as milk fat are introduced; further, this temperature tends towards a maximum as the rate of cooling is reduced, so that once the chocolate has left the tempering machine, if the tempering has been adequately performed, there should be only two conditions governing its treatment if it is to be stored for a while before use, as for instance in the hopper of a depositor or the tank of an enrober. Firstly, the temperature must not be raised so high that the already set fraction of fat remelts, which in the case of the 35% chocolate considered above would seem to mean that it could be reheated to 91°F at least, and secondly, the tempered chocolate must be stored in such a way that maldispersion of the set particles and possibly excessive crystal growth are discouraged; the main safeguard against this is of course adequate stirring. Whilst there may be still further modifying influences on temper, such as might arise for instance from a tendency for solution of one fat fraction in another under certain conditions, or from variations in the physical characteristics of high melting fractions cooled at various rates, it seems fairly certain that however much a chocolate has been supercooled for the purpose of rapid tempering, there is no inherent objection to cautious reheating afterwards; in fact the conditions for storing tempered chocolate ideally correspond with the conditions of tempering with an infinitely slow rate of cooling. It should, however, be pointed out that the reheating cannot be hurried unduly, as contact with a surface materially warmer than the limiting temperature will cause local remelting of the fat, which is just what must be avoided; equally, it should not be unduly delayed, or a false heating may result from the latent heat of excessive crystallisation, which results in a chocolate which is no longer tempered, and which the craftsman usually describes as 'pasty', even though its fluidity does not appear to be markedly affected; in practice, if the chocolate passes straight from a tempering machine into a pipe or stirred container, the water jacket which is held at about the desired temperature, or a fraction higher, a first approximation to the desired condition results.

The primary object of reheating, apart from inhibiting the further formation of set fat crystals, is of course the attainment of maximum fluidity, and it is to be hoped that precise data as to the effect of different methods of tempering on the ultimate fluidity of the chocolate will one day be available. For the present, it only seems possible to judge by the empirical reports of experienced craftsmen, and, where fluidity is critical, the preference for the supercooling and re-heating technique associated with relatively fast rates of cooling is practically universal.

J. Koch is a well-known British writer on Chocolate processing and manufacture. His numerous articles on the subject have appeared in the Swiss International Review, the German Gordian and the British Confectionery Production.

Previous articles in the MANUFACTURING CONFECTIONER were:

Cocoa Beans—Roasted or Dried? in July, 1951  
Successful Steps in Chocolate Processing, in August, 1951

New Techniques in Chocolate Seiving, in October, 1951

Articles by Mr. Koch slated for future publication are:

Milk in Chocolate, a review of current practices in the manufacture of milk chocolate.

The Control of Cocoa Roasting, a detailed account of modern roasting methods.

Thermal Efficiency in Confectionery Processing, an inquiry on the efficient use of heat in the candy plant.

The Texture of Chocolate, concerning the effects of various processing procedures on the finished chocolate product.

# You Asked For It---

# Now You Can Get It!

Responding to many requests from candy men, THE MANUFACTURING CONFECTIONER is pleased to announce the coming publication, in book form, of the splendid series of articles on candy making by

ALFRED E. LEIGHTON  
Consulting Food Chemist & Candy Technologist

*Acclaimed to be one of the most interesting  
series of articles yet written on candy making*

## A PRIMER FOR CANDY MAKING

*Down-to-earth reading  
in non-technical language*

Regular Price \$6.00

### Practical Lessons Include

Fondants  
Fudge  
Caramels  
Marshmallows  
Nougats  
Jellies  
Chocolate

For  
Candy makers  
Foremen  
Service Men  
Salesmen

*All will find this  
book useful to them*

Pre-Publication Offer → Advance Orders

Now Accepted At

\$5.25 per copy

Order Your Copy

← TODAY

And Save 12%

Shipment Immediately Upon  
Publication

Book Sales Dept.  
The Manufacturing Confectioner Publishing Co. 1952  
9 South Clinton St.  
Chicago 6, Ill.

Please enter my order for \_\_\_\_ copies of A PRIMER FOR CANDY  
MAKING by Alfred E. Leighton. I understand that my copy will be  
shipped immediately upon publication.

My Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

# candy making for the beginner:

by ALFRED E. LEIGHTON

Consulting Food Chemist & Candy Technologist  
Riverdale, N. Y.

## Lesson XII (Cont'd)

### CHOCOLATE—ITS MANUFACTURE, AND USE IN CANDY MAKING

#### *Definitions and Standards of Identity as Applied to Cocoa Products*

The Food & Drug Administration has issued standards of identity and definitions, to guide all concerned in commercial transactions involving cocoa products. Significant extracts are given here to provide the student with some knowledge of what to look for and expect from a given chocolate product.

*Cocoa Nibs*, also known as cracked cocoa is defined as the food prepared by heating and cracking dried, cured and cleaned cocoa beans, and removing the shell. They may have been treated with any of the optional alkalies such as potassium carbonate or bicarbonate, sodium, potassium or ammonium hydroxides, oxide or carbonate of magnesium. Any one, or a mixture of one or more of them, may be used, providing the neutralizing value of each alkali or mixture, is maintained at the same level in every case, in accordance with the Food & Drug standards as defined in the regulation. The shell content must not exceed 1.75%. If optionally treated with alkali, package labels must so state, or the name of the specific alkali used may be mentioned.

*Chocolate Liquor*, also known as chocolate, baking chocolate, bitter chocolate, cooking chocolate, or bitter chocolate coating, is defined as the solid or semi-plastic food prepared by finely grinding cocoa nibs. It may be standardized for cocoa butter content by mixing it with either cocoa butter or cocoa powder of breakfast, medium or low fat content as indicated. It may be flavored with spices or with any of the following:—ground vanilla beans, any natural food flavoring oil, oleo-resin or extract; vanillin, ethyl vanillin, coumarin, butter milk fat, dried malt extract, ground coffee, nut meats, or salt (artificial butter, milk or chocolate flavors are not included in the foregoing list). When optional ingredients are added, the package label must so state. Chocolate liquor shall not contain less than 50% cocoa butter and may go as high as 58%.

*Sweet Chocolate*, known also as sweet chocolate coating, is the solid or semi-plastic food prepared by intimately mixing and grinding chocolate liquor with or without the addition of cocoa butter, sweetened with one or more of certain optional sweeteners. It may be spiced or flavored with the same ingredients as mentioned under chocolate liquor, including artificial food flavors,

honey, molasses, brown sugar, maple sugar, or dried malted cereal extract, but excluding artificial butter, milk, or chocolate flavors. Emulsifying agents such as lecithin not exceeding 0.5%, or certain mono or di-glycerides or their combinations with mono sodium phosphate alone, or in admixture, up to the extent specified: 0.5%. Where optional dairy ingredients are added, the finished product must contain not less than 12% milk constituents solids. Such milk constituent solids may be obtained from any of the concentrated milks of any type, including butter milk and malted milk. The optional sweeteners may be any one or more of the following—sugar (completely or partially refined) or its mixture with dextrose (Dextrose not to exceed one third of the total weight of sweeteners used); sugar and corn syrup solids (corn syrup solids limited to one fourth of the total sweeteners used); other numerical relationships of dextrose and corn syrup solids in the total sweetener content are also specified. Sweet chocolate shall contain not less than 15% chocolate liquor, whereas semi-sweet chocolate, known also as bitter-sweet chocolate, semi-sweet chocolate coating, shall contain not less than 35% chocolate liquor.

*Milk Chocolate*, known also as sweet milk chocolate, milk chocolate coating, or sweet milk chocolate coating, is the solid or semi-plastic food consisting of an intimate mixture resulting from grinding chocolate liquor, with or without added cocoa butter, but including the sweetening agents permitted under sweet chocolate, and one or more of the following optional dairy items:—milk, concentrated milk, evaporated, sweetened condensed, dried milk, butter, milk fat, cream, and any of the other dairy items mentioned under sweet chocolate. The non-fat milk solids of any single, or combined two or more dairy items shall not exceed 2.43, nor be less than 1.20 times the weight of the milk fat contained in the chocolate product. The finished product must contain not less than 10% chocolate liquor, 3.66% of milk fat, and 12% of milk solids not fat. Label statements must declare artificial or other flavors when used, alkali

*This series of articles by Alfred E. Leighton, consulting food chemist and candy technologist, is designed to fill a gap existing in the confectionery industry caused by the prevalence of departmentalization in manufacturing operations. This has discouraged the all around candy maker to the point where as a craftsman—he is a fast vanishing entity. The series is designed exclusively for the beginner to better his understanding of the function of ingredients and the "why's" of candy making.*

*The series is soon to be published in comprehensive book form by The MANUFACTURING CONFECTIONER Publishing Company. Pre-publication orders for the book are now being accepted.*



processed when such is the case, and the presence of emulsifiers if added.

*Standards of Identity* for other special chocolate products such as; butter-milk, skim milk, and vegetable-fat chocolate have also been established. In view of their secondary rating, and lesser importance to the candy maker when compared with the products already described, they will be omitted from this listing. In place of them the following description of basic requirements of cocoa powder products is given:

*Breakfast Cocoa*, known also as High Fat Cocoa, is the food prepared by pulverizing the material left after part of the cocoa butter has been removed by pressing the ground nibs (chocolate liquor). The same optional ingredients may appear in cocoa as appear in chocolate liquor, and the same label regulations apply to the packages. Artificial flavors, as under chocolate liquor, with the exception of those that imitate chocolate, milk, or butter, may be added, and cocoa butter content must not be less than 22%.

*Medium Fat Cocoa* contains less than 22% but more than 10% cocoa butter.

*Low Fat Cocoa* contains less than 10% cocoa butter. Label regulations for low fat and medium fat cocoas are the same as apply to high fat cocoas.

### Lesson XIII CONCLUSION

IN THIS series of lessons we have lightly touched upon several subjects without going into fuller detail concerning them. Now, in order to round out these lessons, we shall examine each of these subjects more closely.

#### Crystallizing

This is not to be confused with the internal growth of sugar crystals or graining, described in earlier lessons. Instead, it is the finishing process given to creams, jellies, and the like, the pieces acquiring an attractive and brilliant appearance, due to the deposition of sugar crystals on the candy surfaces. These crystals of more or less controlled size emerge from a specially prepared sugar syrup known as "crystallizing syrup."

Crystallizing syrup is prepared by dissolving pure sugar in water (100 lbs. sugar in  $3\frac{1}{3}$  gallons water) and boiling until a certain definite strength of dissolved sugar solids is obtained. The strength of the syrup, or "Baumé" as it is called, is obtained by gauging its density at the boiling point with a hydrometer. (The Baumé hydrometer, for those who have not seen one, looks like a large sized model gauge used for determining the electrical charge of a storage battery.) In crystallizing work the size of the deposited crystals, which may vary from fine to large, is to a certain extent controlled by the degree Baumé to which the syrup has been boiled. This will be around 34° or from 33° to 36° F. Plus or minus one half degree Baumé in the final strength of the syrup, is sufficient to produce a noticeable difference in the size of the deposited sugar crystal, other things being equal. Since Baumé readings vary with the temperature at which they are taken, it is customary to take the reading at the boiling point for the sake of uniformity. When the syrup, prepared as described, reaches the required strength it is permitted to cool, undisturbed, until it falls to usable

temperature, around 90° F. plus or minus a few degrees. Because the syrup when hot is saturated, it contains more sugar than it can possibly hold when it is cool. The syrup, as it cools, becomes super-saturated and, therefore, it must be treated gently during the cooling, or some of the sugar will drop out prematurely in crystalline form. When applying the crystallizing syrup to candies, its temperature should never be so high that it will soften or melt the fine cream centers. A temperature of around 90° F. plus or minus 10° may be employed; it will depend upon the type of confection to be treated. Candies for crystallizing should be firm, dry, and free from all traces of casting starch, otherwise the crystals will not adhere properly to the surfaces or delicate mould designs. Candy pieces are placed in trays to prevent floating, and immersed in crystallizing syrup at the end of the working day to remain overnight and acquire their crystal covering. When removed from the syrup after a 12 hour immersion, the pieces are carefully drained and permitted to air-dry before being packed. Room temperatures during crystallizing should not be allowed to climb above normal, lest the deposited crystals grow to unwanted sizes. In very particular work, crystallizing will be done during the day, so that the growth of the crystals can be watched and the candies removed from the syrup when the desired size has been reached. Prolonged immersion after that point only enables the crystals to grow larger and coarser. When properly done, crystallized candies are attractive and brilliant with reflected highlights from the sugar crystals. Colored creams of appropriate shape and delicate design take on a new glamorous appearance after such finishing.

#### Cordialisation

This is the term applied to the change, from the solid to the liquid, or partially liquid state, which is brought about in fondant creams, by the action of a chemical ferment, or enzyme, known as "invertase", which is extracted from yeast. Note. An enzyme is defined as a chemical substance that is capable of bringing about certain specific physical or chemical changes in organic matter. Each enzyme, and there are many, is capable of doing one kind of specific job and one only. Invertase, for example, will split or invert sugar (sucrose) in solution into equal parts of two other sugars: levulose and dextrose (invert sugar). Another known as "Lipase", will split fats into fatty acids and cause a kind of rancidity (very undesirable in candy fats, nuts, etc.)

#### Cherry Cordials

One of the best known examples of cordialisation in candy work is cherry cordial. In order to induce cordialisation, about 2 to 3 ounces of invertase are added and mixed with every 100 lbs. of fondant. Temperatures up to, but not exceeding, 165° F. are suitable for the mixing of invertase. (Enzymes are heat sensitive, and inactivated by exposure to high temperatures, hence the limitation to 165°.) Fondants for cordialisation are usually made from all sugar, sugar and invert, or sugar and low corn syrup mixtures. Corn syrup will not cordialise; therefore invertase acts only upon the sugar (sucrose) part of the fondant, to produce sugar inversion and consequent liquefaction. In the making of cherry cordials, the drained fruits are either dipped in a suitable fondant containing

the correct amount of invertase, or the fondant is cast into moulds, and the cherries deposited or placed in the cast fondant contained in the moulds, or alternatively the cherries are rolled in powdered sugar, then deposited in moulds, and the fondant cast over and around them. Immediately after the fondant has set, it is coated with chocolate, and the candy set aside for a period of several weeks at normal room temperature, or slightly higher, to complete the cordialisation process and permit the fondant to liquefy. Other fruits such as pineapple cubes, kumquat pieces, raisins, grapes, etc., may be fondant dipped, or covered in any of the ways described, and subjected to the cordialisation process. Partial cordialisation of creams may be utilized as a means of producing semi-flowing and other soft consistencies in fondant work.

The prevention of unwanted fermentation in creams, due to the presence of wild yeasts in a fondant which contains too much moisture, is another and valuable advantage to be derived from the addition of invertase to the fondant formula. The reason for this is, that, when invertase acts on sugar it requires water to complete the inversion. The water required can come only from the fondant, which yields it up to enter into the chemical identity of the invert sugar of which it (the water) becomes a part. Therefore, after the action of the invertase, the resultant mass contains more solids in solution, and hence insufficient water to support the activity of the wild yeasts. These yeasts must also have a certain amount of water to maintain their growth and life processes—enough water is usually present in fondant to supply that which is needed; unless it is withdrawn, as has been explained, by the inverting action of the invertase. The wild yeasts, though still present, cannot produce fermentation—the background has been made unfavorable by the withdrawal of the available water supply by the action of the invertase on the cream.

#### Water

Water is a necessary ingredient in practically all candy. It must be pure, if wholesome, good-tasting candies are to be made. All too often this fact is overlooked or ignored—its importance has not universally recognized or appreciated. Natural waters vary in quality—their contents of dissolved solids depends upon the localities from which the waters originate and through which they pass. Some waters are hard, some soft, some alkaline, while others may be acidic. They may contain iron, copper, or lead in traces, in addition to the usual lime and magnesium salts. Organic matters or dissolved gasses may be present; chlorine may exist in excess, introduced in purification processes. Water that is alkaline will interfere with the action of cream of tartar; water that is too acid will invert sugar; iron and copper will hasten deterioration by causing or speeding up the onset of rancidity. Dissolved organic matter can be woefully harmful, and excessive chlorine can be harmful by inducing undesirable deterioration. Even though a water may be classified as drinking or potable water, and come through a tap connected to the municipal water supply, that fact is not necessarily a guarantee that such water is perfect for candy making. Water which contains solids in solution, when used for dissolving sugar, is concentrated in cooking processes. The dissolved solids are proportionately increased, and therefore as a result of concentration more

capable of exerting undesirable effects, both during and after the cooking processes are completed.

Every candy manufacturer should assure himself on the quality of the water available, before deciding to use it routinely in his candy making. If as a result of chemical and bacteriological analysis, it is reported as undesirable for candy making, it should not be used. Resort should then be made to distilled or, better yet, de-ionized water (because it costs less per gallon). Both such processed waters are free from dissolved solids, and in the case of de-ionized water can be made to emerge neutral in reaction, from suitable processing techniques and equipment.

#### Nuts

Nuts are an important ingredient in candies. The distinctive flavors of nuts in candy are appreciated by consumers everywhere, furthermore, the presence of nuts in candy adds to the sweetmeat's nutritional value and to its attractiveness. In selecting nuts as a candy ingredient, the following points should be observed. Nuts should be sweet and wholesome, free from rancidity, mouldiness, and worm infestation, they should not be shriveled and dried, nor undersized for their respective classifications. On arrival at the candy factory they should be inspected for quality, and not permitted to go very far into the plant until they have been passed upon favorably. The conscientious candy manufacturer, who leaves nothing to chance, will fumigate nuts with such acceptable insecticides as Methyl Bromide, in a properly constructed and Board-of-Health-approved vault, before putting them into general storage. For prolonged periods of storage, refrigeration is the best way to keep nuts fresh and sweet. Fumigation will insure the candy manufacturer freedom from a host of troubles which arise from insect infested merchandise!

Just about every kind of nut known in commerce and available in reasonable volume is used in candy making—from the almond through to the walnut—with pecans and peanuts among the most popular in the United States. Nuts are used plain, ground, cut, made into pastes, processed by dry roasting, or by frying in oil and salting. So-called roasted nuts, which have really been fried and subsequently salted, should be treated with an antioxidant to retard the onset of rancidity—both the salt and the oil can be so treated as to contain a required amount of the rancidity retarder.

#### Peanut Brittle

One of the volume items in nut candies, Peanut Brittle can be made as follows:—Sugar, white: 6 lbs; Canary sugar, light (a grade of soft sugar): 3 lbs; Corn syrup: 7 lbs.; dairy butter: 5 ounces; Spanish peanuts: 8½ lbs. The sugars are dissolved in 3 pints of water in the usual way, the corn syrup added, followed by the butter, and the mixture raised to a temperature of about 235° F. (at sea level). Then the raw peanuts are added and the mass stirred continuously. The nuts become roasted while being stirred in the hot syrup. The temperature is then raised to 270° F., heating rate reduced to prevent scorching, and continued until a finishing temperature of about 295° F. is reached. The mass should be a nice golden brown. The kettle is then removed from the heat, and 2 ounces of Bicarbonate of Soda, dissolved in smallest quantity of water possible, are added to the mixture in

the kettle. The mass will immediately swell and billow up. Stirring is continued until all the bicarbonate solution has been blended in and the color appears to be uniform. The brittle is then poured onto a warmish oiled slab, the candy spread as thinly as possible, and allowed to set. When the sheet is firm enough to handle, it may be cut and turned, stretched if necessary, and cut into suitable sizes for packing.

#### Fruits

Fruits help to glamorise candy assortments as well as individual pieces. There is a variety of fruits to select from, and they may be obtained and used in their glazed form as such, or processed from canned items, into preserves, jams, and jellies. Fruits such as kumquat, pineapple, orange, lemon, lime, cherries, raisins, grapes, dates, and prunes, ginger,—peels such as citron, lemon, lime and orange, when properly processed, impart distinctive pleasing flavors and eating qualities, to the candies of which they are a part.

Cherries that are to be used for making cherry cordials are usually of the maraschino type, and are drained or centrifuged gently to separate them and remove the excessive syrup before they are dipped or covered with fondant.

Some candy manufacturers do their own preserving or glaceing of fruits during seasons of fruit abundance. However, canned fruits of good quality can be obtained at any time from processors without waiting for seasons of plenty. For most candy manufacturers such sources of supply are adequate and satisfactory in every way.

The processes of making preserved fruits substitutes sugar or sugar-corn syrup blends for the usual water contents of the fruit. To achieve the best results, the complete process has to be done in easy stages, with gradually increasing concentrations of syrup over a period of several days. The fruit is first tenderised if necessary by boiling for a short period of time in plain water, then allowed to cool for a few hours in fresh water, after which it is drained and covered with a 60-40 sugar-corn syrup blend, and allowed to stand for about 8 to 12 hours. Following that period the whole mass of fruit and syrup is raised to just the bare boiling point, and allowed to simmer for one quarter hour. The fruit is then drained from the syrup which is then concentrated to a density of 26° Baumé, and again poured over the fruit. The procedure of soaking in syrup and draining off the excess from the fruit, concentrating the syrup by 2° Baumé in the meantime, is repeated each day for five successive days. Following that, the preserved fruits may be packed in suitable containers until needed as candy making ingredients. Further processing such as glaceing will depend upon the end use intended for the fruit. (To be concluded in the February issue)

---

*This series of articles, especially written by a veteran confectionery technologist for the neophytes of the industry, is at present being arranged in manual form for ready reference.*

*Acclaimed as "one of the few textbooks, not just another volume of the formulae" in its field, "A Primer of Candy Making" will be available in the near future. Orders for the volume are now being accepted by The MANUFACTURING CONFECTIONER Publishing Co., 9 S. Clinton St., Chicago 9, Ill.*

## Conventions -- Meetings

January 8—American Association of Candy Technologists, Chicago section, monthly meeting, Henrici's restaurant, Chicago, Ill.

January 9—Association of Manufacturers of Confectionary and Chocolate, annual dinner, Waldorf-Astoria Starlight Room, New York City.

January 13-16—National Association of Variety Stores merchandise trade show, Baker Hotel, Dallas, Texas.

January 14-17, 1952—Plant Maintenance Show, annual exposition, Convention Hall, Philadelphia, Penna.

January 21-24—National Food Brokers Association, annual convention, Mayflower hotel, Atlantic City, N. J.

January 27-30—Retail Confectioners' Association of Philadelphia, annual candy show, Benjamin Franklin hotel, Philadelphia, Penna.

February 3-7—National Association of Variety Stores merchandise trade show, LaSalle Hotel, Chicago, Illinois.

February 17-20—National Association of Variety Stores merchandise trade show, Municipal Auditorium, Atlanta, Georgia.

February 21—New Jersey Ice Cream and Candy Manufacturers' Association, Inc., annual dinner dance.

February 25—Retail Confectioners' Association of Philadelphia, Inc. annual banquet, Benjamin Franklin hotel, Philadelphia, Penna.

March 6-7—Western Candy Conference, annual meeting, Fairmont hotel, San Francisco, Calif.

March 22-April 6—Chicago International Trade Fair, Navy Pier, Chicago, Illinois.

March 30-31—Packaging Machinery Manufacturers Institute, semi-annual meeting, Hotel Dennis, Atlantic City, N. J.

April 1-3—Point-of-Purchase Advertising Institute, annual symposium, Waldorf-Astoria hotel, New York City.

April 1-4—American Management Association, 21st National Packaging Exposition, Atlantic City Auditorium, Atlantic City, N. J.

April 15-17—Research and Development Associates, Food and Container Institute, fifth annual meeting, Palmer House, Chicago, Ill.

April 23-May 4—International Sugar Exhibition, R. A. I. building, Amsterdam, The Netherlands.

April 24-25—Sixth Annual Pennsylvania Manufacturing Confectioners' Association Production Conference, Lehigh University, Lehigh, Penna.

April 28-30—American Oil Chemists' Society, spring meeting, Shamrock Hotel, Houston, Texas.

May 18-21, 1952—National Candy Wholesalers Association, annual convention and confectionery exposition, Palmer House, Chicago, Ill.

June 2-5—National Confectioners' Association, 69th annual convention, Conrad Hilton Hotel, Chicago, Illinois.

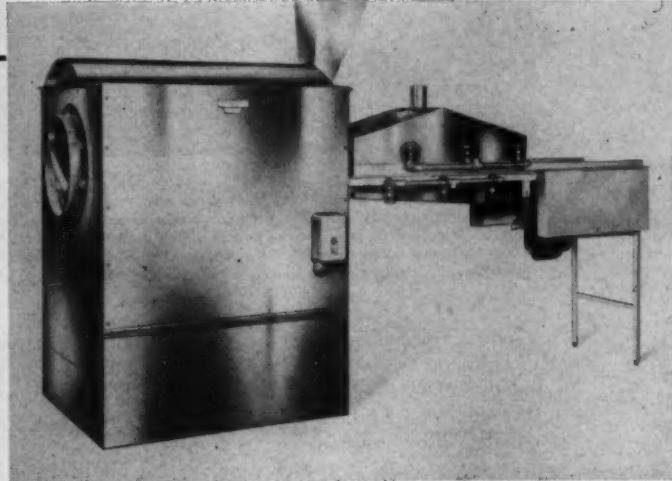


# Candy Equipment

## PREVIEW

HIS SECTION APPEARS QUARTERLY IN THE MANUFACTURING CONFECTIONER

# RESCO Sugar Sander



**No sugar dust**

**No sugar chutes  
or elevators**

**No super steaming  
necessary**

**Completely New Principle—Will Also Dust Marshmallows**

**Lower Initial Cost, Lower Maintenance Costs**

This versatile machine will handle any sugar sanding or dusting problem . . . is less costly . . . uses less space . . . will take the capacity of a mogul or less.

**Inner drum easily removable for cleaning**

**Drum is stainless steel & aluminum**

**V-belt motor drive**

**Floor space 3' x 10'**

**Write today for detailed description & full technical information**

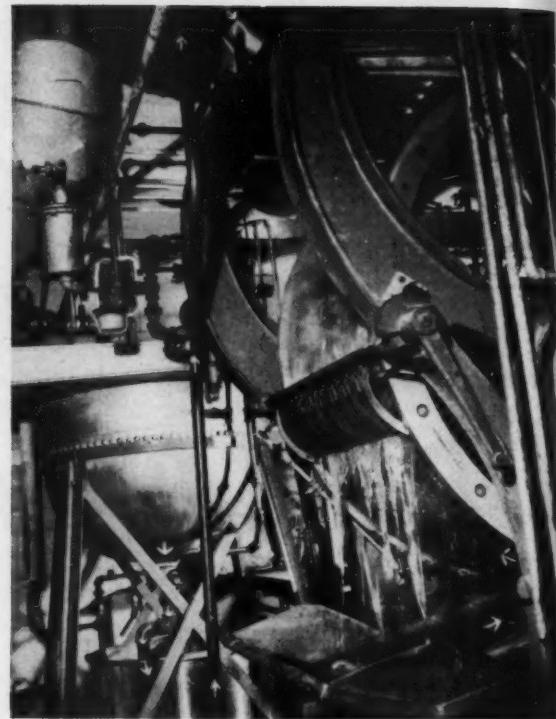
**ROBERT E. SAVAGE CO.**

1901 Clybourne

OFFICE & PLANT

Chicago 14, Ill.

# The Continuous Fondant Production Line



The basic fondant ingredients are mixed in the pre-cook kettle, in the background, at the left. The white arrows point the direction the syrup moves: from the pre-cook kettle down to the holding tank, up the vertical pipe, in the center of the picture, to the steam dome, from the dome through the spreaders, at the top of the picture, over the cooling drum to the scraper, where it drops off into the catch pan.

a fondant specialist, and in the integration of several units of equipment into an uninterrupted production line, as shown in the schematic drawing below. Loft has found that this set-up fulfills their requirements for consistent quality, with a minimum of attention.

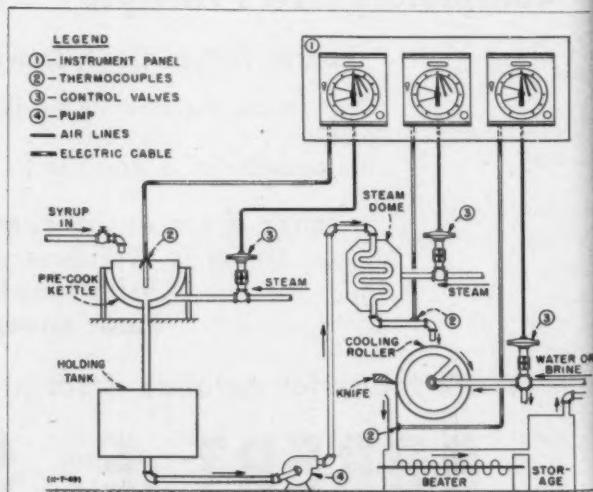
In the process, a measured amount of liquid sugar is piped into the *pre-cook kettle*. Another measured amount of corn syrup is added, from a direct pipe, and finally,

**THE PROBLEM:** converting corn syrup, liquid sugar and granulated sugar into cream fondant in a simplified and continuous process.

The Loft Candy Corporation found the solution in the use of electronic controls, thus eliminating the need for

*This is the first of a series of articles describing candy production systems that have been proved in operation. Articles of this type will appear from time to time in THE MANUFACTURING CONFECTIONER. This particular article describes a system for making cream fondant continuously. This is the actual system as it has been working for some time in the factory of the Loft Candy Corp., Long Island City, New York.*

*We did not choose this system as the subject of this article because we believe that it is the best possible system, but rather because it is one that has been in operation long enough to prove its usefulness in turning out a good product, economically, with a minimum of attention, and of consistently high quality.*



A schematic drawing of the fondant system. The thermocouples and control valves (numbered 2 and 3) can be readily seen in the pictures.

dry granulated sugar is dumped into the kettle, by hand, to complete the amount of sugar desired and to cut down on the percentage of water in the batch.

The pre-cook kettle is equipped with a Brown temperature indicating, regulating, and recording instrument which is activated by a thermocouple. When the ingredients are in the kettle, the temperature control instrument is set for the final temperature desired (anywhere up to 230°F) and the cook is started. The control is attached to a valve in the steam line leading to the kettle and when the final temperature for the pre-cook is reached, it automatically turns off the steam.

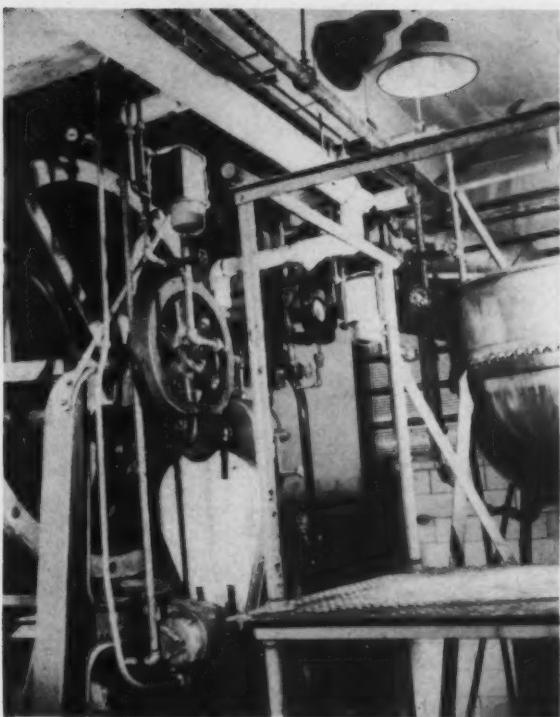
The operator then opens the gate valve at the bottom of the kettle and the batch drops down through a filtering screen into the *holding tank*. A new batch is immediately started in the pre-cook kettle to assure a constant flow of syrup through the system.

From the holding tank, the syrup is pumped up to the *steam dome*, where it is started through the fondant machine. The fondant machine, as we shall see, is the heart of the process. Manufactured by the Hohberger Manufacturing Co., it was first designed and built, essentially in its present form, in 1915. It includes the steam dome, a rotating cooling drum and spreader, and a beater.

As the syrup enters the steam dome, it flows through spiral tubing within the steam filled dome, where it is given a final cook at from 238° to 248°F., depending upon the type of fondant desired. A factor contributing to the quality of the fondant produced in this unit is that the final cook is made with the moisture still in the syrup, that is, the moisture of the difference between the pre-cook and final cook.

The heat within the steam dome is also controlled by instrument. A thermocouple at the dome outlet records the temperature of the syrup after final cook and accordingly regulates a valve in the steam line running to the dome to maintain a constant cooking heat.

The syrup, at final cook, flows from the steam dome into the *spreader housing* where the moisture leaves the



The opposite side of the production unit reveals the details of the instrument controlling equipment. The unit in the upper corner controls the amount of cold water that enters the cooling drum. The unit at the upper left corner of the window controls the amount of steam entering the pre-cook kettle.

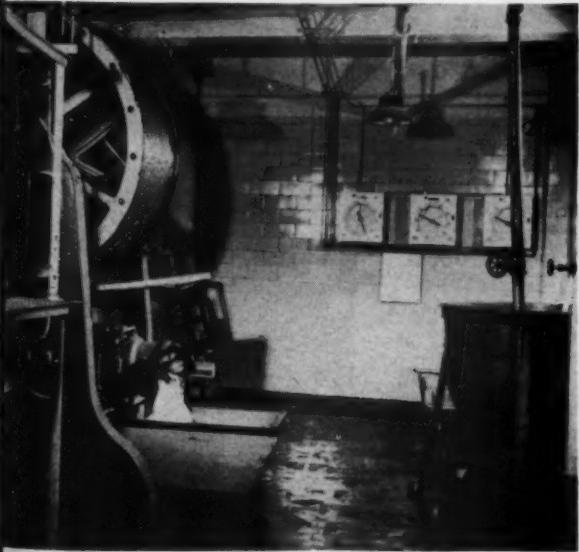
syrup and is exhausted to the atmosphere and the syrup is spread over the surface of the *cooling drum*. Cold water is continually circulated through this drum to speed cooling. The rate of flow of the water is controlled by a third Brown thermocouple which determines the temperature of the cooled syrup as it leaves the drum and operates a valve in the cold water line running to the drum.

The syrup stays on the drum approximately one minute, and is then removed by scrapers which drop it into a stainless steel *catch pan*.

The catch pan directs the cooled syrup into the *beater*, which performs the creaming process in addition to further cooling. The beater is of smooth bore construction and jacketed. The paddles, or individual beaters, are heavy cast-iron stumps that are reported to simulate the action of old-fashioned hand beating. It operates continuously, taking the cool syrup in at one end and moving it laterally while creaming, then discharging the finished fondant at the other end. The speed may be varied manually to conform with the desired consistency, or to the amount of corn syrup in the formulation.

The finished fondant drops from the end of the beater into carts for storage, or may be fed directly to the depositors for use.

Reported production for the system is from 1000 to 2000 pounds per hour, depending upon the type of fondant desired. Due to the advantageous use of electronic regulators, the entire production can be handled by two men, one at the pre-cook kettle, the other at the discharge end of the beater. The controlling instruments are manufactured by the Brown Instrument Division of the Minneapolis-Honeywell Regulator Company.



Pure fondant flows from the end of the fondant machine into a storage cart. The controlling instruments for the entire operation are on the far wall. The brick and tile construction of the room allows complete steam cleaning.

kettle.  
the direction  
holding  
the steam  
off into

al units  
ine, as  
found  
sistent

sugar is  
mount  
finally,



WATER OR  
BRINE  
HFF  
TORS-  
AGE

couples  
in the  
ONER

## SUBJECT TO PRIOR SALE

The equipment listed below is the idle property of candy manufacturers.

It is good usable equipment, much of which has been inspected by our organization.

Sold on commission basis only, fair prices are assured as handling, shipping, and warehouse charges along with high profits are eliminated.

### CHOCOLATE EQUIPMENT

5' N. E. Melangeur  
5' Lehman Melangeur  
6-Roll Refiner  
5-Roll National Equipment Refiner  
5-Roll Lehman Hi-Speed Refiner  
Micro Pulverizer  
2 Jabez Burns Gas Fire 5-bag Roasters  
Chocolate Kettles, 150 to 2000 lb. capacity

### STARCH EQUIPMENT

N. E. Steel Mogul  
N. E. "AD" Mogul  
N. E. "A" Mogul  
Bullerjahn Drier and Cooler with Wolf-Sheffman Cleaner.  
Bullerjahn Drier and Allis Chalmers Reel—complete system.  
Huhn Drier and Cooler with all accessories, complete.

### HARD CANDY EQUIPMENT

Simplex Gas Fire Vacuum Cooker with three kettles.  
Simplex Steam Vacuum Cooker with two pre-cooking kettles.  
600 and 1000-lb. per hour N. E. Continuous Hard Candy Cooker.  
Brach Cutters  
Peerless Plastic Machine with various sets of dies.  
2—Rostoplast Machines with many dies.  
2—Gabel Machines with 10 sets of chains.

### CREAM EQUIPMENT

Hohberger Cream Machine (latest style)  
Jaccolucci Cream Beater with syrup cooler.  
2—5' Ball Beaters  
2—4' Ball Beaters  
Simplex Double-Tilt Vacuum Cooler

### WRAPPING EQUIPMENT

3—Acma Hard Candy Wrapping Machines, 110 pieces per minute.  
2—G2C Triangle Bag Filling Machines  
1—DF Bar Wrapper with magazine feed  
1—DF Bar Wrapper with roll-card feed

### ENROBING EQUIPMENT

32" Enrobers, Greer and National Equipment  
24" Enrobers, Greer and National Equipment  
16" Enrober lines complete with tunnel and compressor.

*John Sheffman, Inc.*

152 West 42nd Street

New York 18, N. Y.

# What's New in Candy Equipment

The products described help keep you up-to-date on new confectionery equipment, materials of all types. The items below are coded for your convenience. For any further information, write to THE MANUFACTURING CONFECTIONER, 9 S. Clinton St., Chicago 6, Illinois. Use the coupon on page 28.

### New Surface Temperature Thermometer

A new surface temperature thermometer for the fast and accurate checking of the outside temperature of pipes, plastic dies, and rubber molds; for checking external temperatures for wall leakage of refrigerators, cold chambers, and freezers; for checking the temperatures of journals and other bearings, electric motors, and cylinder blocks; also, for the checking of residential and industrial wall, ceiling and floor temperatures.

The instrument may be quickly and easily affixed to any flat surface by applying a small amount of silicone grease, which is supplied with the instrument, and sticking the thermometer in place. With the thermometer is furnished a small magnetic clamp which will hold it securely in place when applying it on steel dies or other ferrous surfaces.

The range is 0° to 300°F calibrated in 2° in-

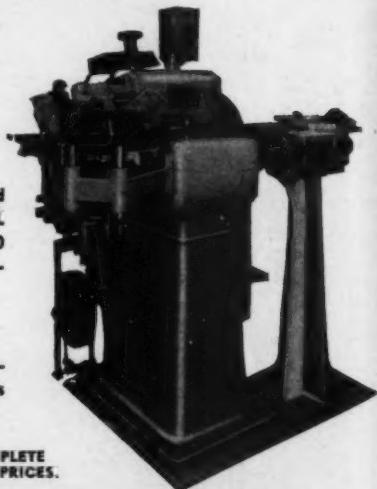
## YES! WRAP UP TO 450 Candies Per Minute! IDEAL

one of the world's finest

### WRAPPING MACHINES

- ★ Fast
- ★ Dependable
- ★ Long Life
- ★ New high-speed  
**SPECIAL MODEL**  
—wraps 325-450  
pieces per minute.

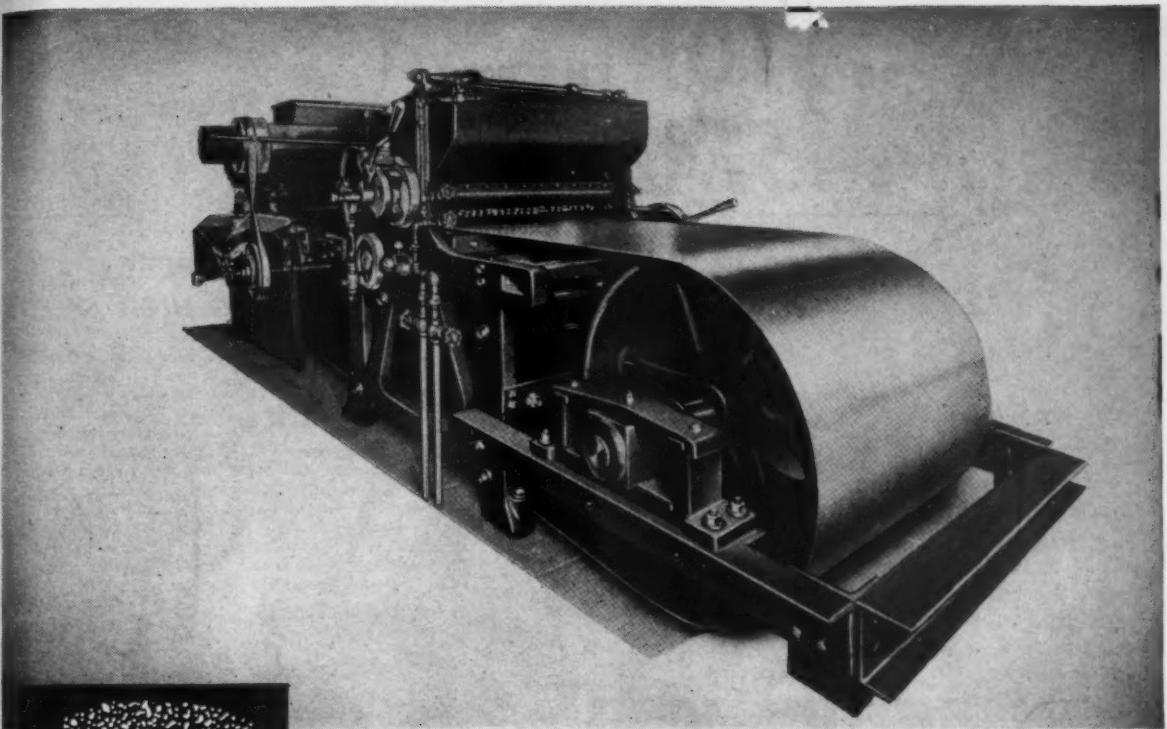
Also available:  
Senior Model—  
wraps 160 pieces  
per minute.



WRITE FOR COMPLETE  
LITERATURE AND PRICES.

**IDEAL WRAPPING MACHINE CO.**  
MIDDLETOWN, N. Y.  
EST. 1906

U. S. A.



here's why most of America's  
largest chocolate manufacturers  
depend on the famous  
**Racine Chocolate Depositor**

There's good reason why these manufacturers, America's largest and best-known, prefer and rely on The Racine Chocolate Depositor exclusively for producing solid chocolate goods, such as, stars, bits, wafers, patties, nonpareils, midget bits, and others.

**Automatic!** Automatically, the Racine Chocolate Depositor casts, cools and then discharges the candies. No molds are used—the candy is cast directly on a polished steel conveyor belt.

Only 1 Part-time Operator Re-

quired! Automatic and continuous, only one operator is needed to control the machine—even at maximum capacity.

**Quality!** Chocolates produced with the Racine Chocolate Depositor have a higher gloss and finish—they retain their full color and luster—in all ways they're better.

Now, you too can make a better chocolate product, faster, with the Racine Chocolate Depositor—the one the leaders use—write today for complete information.

**VACUUM**  
**RACINE**  
CANDY MACHINERY CO.  
CONFECTIONERS' MACHINERY CO.

15 PARK ROW, NEW YORK 38, N. Y.

Western Office and Factory: Racine, Wis. • Eastern Factory: Harrison, N. J.

ate  
all  
on-  
to  
ton  
28.

er

for the  
imper-  
; for  
ge of  
check-  
rings,  
r the  
ceiling

fixed  
ent of  
instru-  
With  
agnetic  
when  
faces.  
° in-

50  
e!

CO.  
S. A.

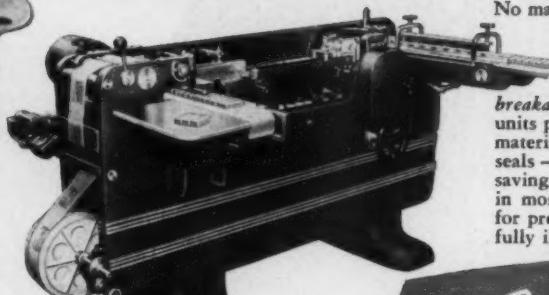
TIONER



# TO STOP THE EYE ... START THE SALE



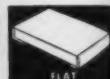
package to attract with this automatic wrapper  
— CUTS COSTS — WRAPS WITH AMAZING HIGH SPEED!



No matter what the product — how solid or fragile — how irregular its shape . . . it becomes a package of eye-appealing beauty when "float" wrapped on the Campbell Wrapper. This continuous feed machine delivers *without breakage* up to 160 single or multiple packaged units per minute, dependent on product. Using wrap materials of all types, it completely heat or glue seals — with crimp or crimp folded ends. Labor saving — only one operator and packer are required in most cases. *Ideal* for most products — perfect for prepackaged foods and meats. Write for fully illustrated brochure.

**Campbell**  
WRAPPER

HUDSON-SHARP MACHINE CO., GREEN BAY, WIS.



Aniline and Gravure Printers, Folder, Interfolders, Laminators,  
Waxers, Embossers, Slitters, Sheeters, Roll Winders, Packaging  
Machines, Crepers and Tissue Converting Units.

## NEW REVOLVING PAN

by  
**LATINI**



- heavy gauge copper machine spun bowl
- convenient on-off switch with overload switch
- shaft mounted on self-aligning ball bearings
- stand enclosed, easily cleaned. Sanitary
- perfectly balanced for accurate operation

CHOCOLATE SPRAYING CO., INC.  
152 West 42nd St., New York 18, N. Y.  
JOHN SHEFFMAN, INC.

Representative

crements. It is 2" in diameter. Total weight—one ounce. Code M1B52.

### New Deflector Speeds Loading

A new deflector that makes truck and car loading more nearly automatic has been developed.

It is attached to the platform end of the telescoping portable conveyor, automatically guides cartons off the permanent belt conveyor and shunts them, at 90°, onto the portable telescopic conveyor which extends into the truck, trailer or box car. Both right hand and left hand deflectors are supplied to take care of removal to either side.

Advantages are: fully automatic operation to the stacking point; no height adjustments needed when conveyors are shortened or extended, one man can set up the system in a few minutes, system can be

Circle Code Numbers and Mail Coupon for Literature  
on Any Item Discussed in This Section to  
The Manufacturing Confectioner  
9 S. Clinton St. Chicago 6, Ill.

MIA52    MIB52    MIC52    MID52

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# A PROFIT-PAYING INVESTMENT...

## THE SAVAGE CONTINUOUS CANDY CUTTER

(Brach Patent)



### THE FIRST COST IS THE LAST COST

No additional chains to make different shapes--changes from one style to another instantly.

Without any adjustment or change the Savage Continuous Candy Cutter will cut any Pillow shaped goods, Chips, Straws or Waffles—either hard or soft centers—and cuts any width or thickness from the thinnest straws to  $\frac{3}{4}$  inch, and from  $\frac{3}{8}$  to  $1\frac{1}{2}$  inches in length.

1. BABY KISSES—any small piece  $\frac{3}{8}$ -inch long and up to  $\frac{3}{4}$ -inch wide—are cut on this series of knives.
2. PILLOWS, CHIPS, STRAWS— $\frac{3}{4}$ -inch long and  $\frac{3}{8}$  to  $1\frac{1}{2}$  inches wide—are cut by this set of knives.
3. STRAWS, CHIPS, PILLOWS— $1\frac{1}{2}$  inches long and  $\frac{3}{8}$  to  $1\frac{1}{4}$  inches wide—are cut on this series of knives.
4. WAFFLES— $\frac{3}{4}$ -inch long and up to  $\frac{3}{4}$ -inch in width—are cut and stamped with this series of knives.
5. THE GUIDE—illustrated separately to the left, has two peculiarly shaped knurls which may be so turned and separated as to regulate the batch to any width from  $\frac{3}{8}$  to  $1\frac{1}{4}$  inches as desired. Adjustments are made by simple thumb screws. An experienced operator can feed the machine without using the guide.

THE GUIDE—the only part of the entire machine that is changed.

High Speed--No Delays--  
Increased Output

(Also sold without conveyor)

Perfect Cutting--No Waste--  
Reduces Cost

# SAVAGE BROS. CO.

M. A. Savage, President • Richard J. Savage, Jr., Vice President  
2638 GLADYS AVE.

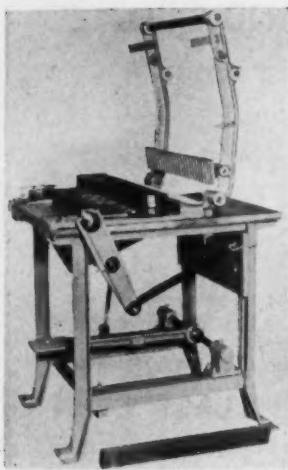
CHICAGO 12, ILL.

Since 1855



## LITTLE WONDER SUCKER MACHINE

For Manufacturing Retailer or Small Operator  
Automatically Inserts Sticks in Suckers



One Retail Manufacturer says,  
*"In place of having 8 or 10 girls sticking the lollipops, we now have one man operating the machine doing identically the same job more effectively. We have not found it necessary to change our formula in any way. We feel this machine will pay for itself in a very short time and it has proven satisfactory in every way."*

Manually operated—makes 24 suckers in each single operation—inexperienced operator can make approx. 100 suckers per minute—Standard dies—Oval in section—Weight can be varied—Automatic feeding—magazine holds approx. 2000 sticks.

JOHN WERNER & SONS, INC.  
713-729 Lake Ave.

Rochester 13, N.Y.

used on either side of a conveyor belt moving in either direction, equipment is readily mobile and can be used anywhere on the loading platform, loading in minimum time at minimum labor cost. Code M1A52.

### New Drying Tunnel

A new self-contained drying tunnel has controlled air circulation so that jellies can go from the sugar sander to the packing department in continuous flow line in less than half an hour, properly dried and ready for packing.

The tunnel complies with all sanitary requirements. Suspended from the ceiling, it does not use valuable floor area. It is designed to do away with all manual handling between the sander and packing tables, and eliminates the need for stock trays and the space they take. Code M1D52.

### New Metal Detection Equipment

New metal detection equipment featuring four types of small-aperture inspection heads for more efficient and speedier location of metallic particles contaminating non-metallic products.

The metal detectors will indicate the presence of even minute particles of metals or alloys, whether magnetic or non-magnetic, and regardless of their depth in the material, as products pass through an inspection aperture on an endless conveyor belt or by means of a chute at rates of 10 feet to 1000 feet per minute.

They can be used to light a warning lamp, ring a bell, stop a continuous process, mark the contaminated object, or deflect it into a specific channel or receptacle for rejects. Code M1C52

*A BURRELL Product That's Making Belting News*

## PLASTICOAT COOLING TUNNEL BELT

Developed by the makers of the most complete line of cooling tunnel belting in the world, this new Burrell belt is rapidly coming into its own with candy manufacturers everywhere—acceptance backed up with substantial orders. Plasticcoat Cooling Tunnel Belt is of single texture construction having the tensile strength of a double texture belt and a super smooth finish. Now, whatever your cooling tunnel needs you can be certain of getting it from Burrell . . . certain, too, that these belts are setting new records everywhere for long life, low production cost, freedom from plant interruption.

**If It's Belting — We Have It**

**"BUY PERFORMANCE"**

**Belting Headquarters**

### 12 BURRELL STARS

- ★ Plasticcoat Cooling Tunnel Belting and Plaques—Single Texture, Heavy Duty or Very Thin Thin Tex Plaques
- ★ Crack-less Glazed Enrober Belting
- ★ White Glazed Enrober Belting Double Texture—Single Texture; Double
- ★ Caramel Cutter Boards and Belts
- ★ Bottomer Belts (Endless—Treated and untreated)
- ★ Feed Belts (Endless—treated and Untreated)
- ★ Packing Table Belting (Treated and Untreated)
- ★ Innerwoven Conveyor Belting
- ★ Batch Roller Belts (Patented)
- ★ Wire Belting
- ★ Vee Belts
- ★ Hose (Air; Water; Steam; Oil; Creamery)

# BURRELL

**BELTING CO.**



7501 NORTH ST. LOUIS AVE., SKOKIE, ILLINOIS

g in  
and  
load-  
Code

rolled  
sugar  
uous  
dried

uire-  
not  
way  
and  
tock

types  
and  
non-

even  
netic  
the  
ture  
ate at

bell,  
ob-  
for

us

tilting  
ure,  
Thin-  
tilting  
ouble  
ble  
ts  
ented  
and  
and

oil:

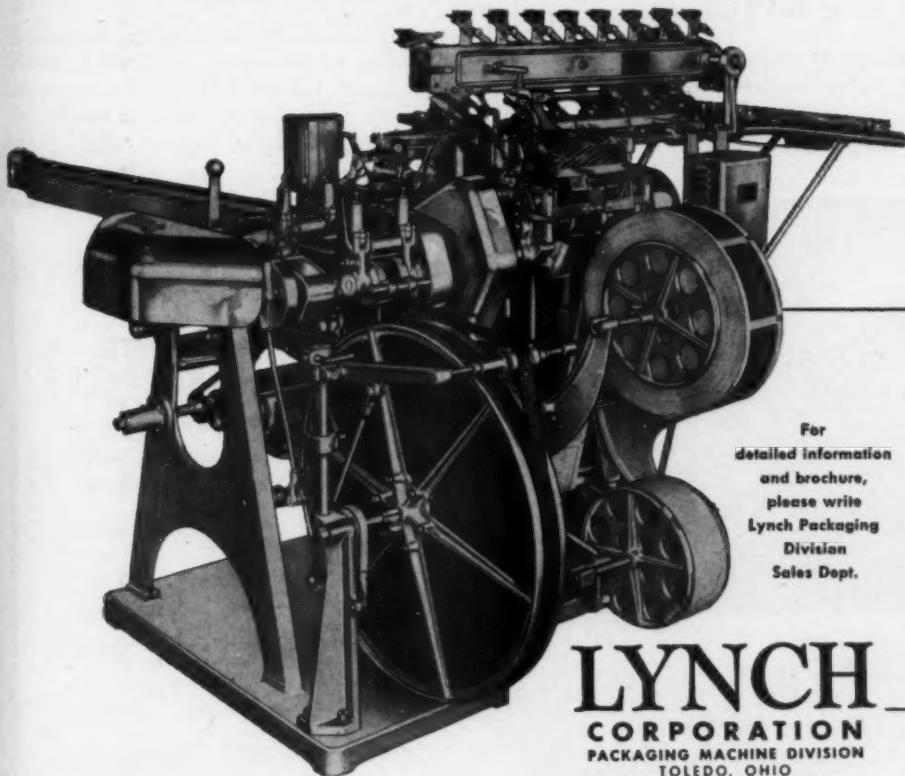
# LYNCH WRAP-O-MATIC

**MODEL RA (or PB) IS YOUR WRAPPING ANSWER!**

For - candy bars...multiple pack bars...  
caramels...wafers...mounds...clusters...cups;

Also many items in other fields.

Featuring : Boat or card or no card wrap.



For  
detailed information  
and brochure,  
please write  
Lynch Packaging  
Division  
Sales Dept.

## LYNCH

CORPORATION  
PACKAGING MACHINE DIVISION  
TOLEDO, OHIO  
SAN FRANCISCO, CAL



PAR AIR  
COMPRESSORS



PAR  
REFRIGERATION  
COMPRESSORS



WRAP-O-MATIC  
CANDY & COOKIE  
WRAPPING  
MACHINES



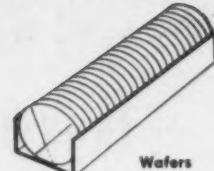
MOPAC  
PAPER PACKAGING  
MACHINES



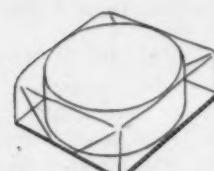
MOPAC  
BUTTER & OEO  
PACKAGING  
MACHINES



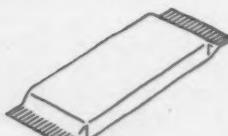
GLASS FORMING  
MACHINES



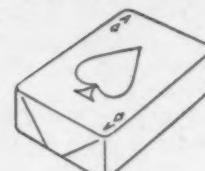
Wafers



Cup or Mound



Crimped End Bar



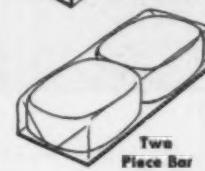
Playing Cards



Cigar  
Pack



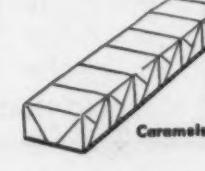
Cake  
Ornaments



Two  
Piece Bar



Die  
Fold Bar



Caramels

# Preventive Maintenance for Industrial Trucks

fourteen ways to lower operating costs  
and cut down overhead

Fourteen ways to lower operating costs of electric industrial trucks were outlined by Charles Greener, general service manager of the Automatic Transportation Company, Chicago, leading manufacturer of such equipment.

Planned preventive maintenance assures reduced service budgets, longer truck life, and less "down" time while trucks undergo repairs, Greener said. His program for one-truck or fleet operations, based on studies of successful techniques, includes these recommendations:

1. Loads should suit the truck. Teach your operators that truck capacity varies with load length, and that continual overloading causes serious breakdowns and plays havoc with tire bills. Use trucks with ample reserve capacity.

2. Keep floors clean and in good condition. Bad surfaces cause damaging strains and shocks, and again your tires suffer unnecessarily.

3. Replace tires when they develop flat spots or when

big chunks of rubber are gouged out. Stretching tire use damages the truck, costs you far more in repairs than you think you are saving, and is bad for driver health and efficiency.

4. Let the right man—the mechanic—do repair work. When something goes wrong, have your operator call the mechanic, and don't let him have the truck pushed or towed without the mechanic's orders.

5. Your operators should be trained thoroughly in proper use of equipment assigned to them. Whenever possible each man should work permanently with the same truck.

6. When you get a new truck, be sure to obtain full information about it. Have the manufacturer's service representative demonstrate it for your operators. He should advise your maintenance force, explain spare parts needs, and make sure no damage was incurred in shipment.

7. Your mechanical maintenance program, whether large or small should follow a regular schedule. Use a series of mechanical worksheets or tags prescribing services to be performed. Keep a fleet maintenance record to learn the life expectancy of important units of the truck. This enables you to make necessary changes in advance to avoid complete breakdown, preventing loss of operating time.

8. Trucks need a monthly lubrication and mechanical check, usually about an hour and a half, which should follow removal of dirt and grit from the undercarriage. Fleet operation calls for a cleaning rack in a small room or enclosed area. A weak alkaline solution applied under



Size Range — Millimeters

- Min. — All wraps — 20 x 12 x 8
- Max. — Double — 38 x 25 x 15
- Max. — Sacchetto — 38 x 25 x 15
- Max. — Cestello — 28 x 22 x 15

## SAPAL BTB

HIGH SPEED PRECISION WRAPPER  
for SACCHETTO, CESTELLO,  
and DOUBLE-TWIST WRAPS

- Enclosed mechanism with automatic lubrication
- Wide choice of styles of wrapping
- Every modern device available
- Quick changeover between articles of varying size
- Reliable smooth and silent operation
- Made in Switzerland by precision engineers

Send for full particulars of this and many other Sapal machines from the sole distributors for North America:—

# BRAMIG & CO. LTD.

Suppliers of Specialised Chocolate Cocoa and Confectionery Processing Equipment

MIKRO HOUSE

CREECHURCH LANE

LONDON E.C. 3

ng tire  
repairs  
driver  
  
er work.  
or call  
pushed  
  
ghly in  
never  
ith the  
  
ain full  
service  
s. He  
e parts  
n ship-  
  
hether  
Use a  
g serv-  
record  
of the  
ges in  
g loss  
  
anical  
should  
rriage.  
room  
under

steam pressure does a good cleaning job, and compressed air is best for drying. After the mechanical check, lubricate chart so your maintenance men can follow it easily. During the check, put the truck through its paces thoroughly in all speeds, and with a normal load.

9. Semi-annual mechanical checks and lubrication are more extensive. Included are cleaning and repacking wheel bearings, changing drive axle grease or oil, and other services not assigned to the short-term check-ups.

10. Electrical checks should be conducted on a weekly, monthly and semi-annual basis. The weekly check includes tightening loose fittings and replacing worn or damaged ones. Monthly, all electrical operations should be observed closely, and semi-annually, the complete electrical inspection will save you money. Tightness of electrical connections and proper insulation of wires should be noted carefully.

11. Be careful with your batteries. Overwatering will weaken the electrolyte, and when it spills over from the battery case, the electrolyte causes corrosion of other truck parts. Flushing the battery is a necessity, as the battery must be kept clean. Make this part of the weekly inspection. Use properly maintained automatic charging equipment.

12. General overhauls should be scheduled according to your operating conditions, such as the number of hours the truck works daily, plant conditions, and the driver's ability.

13. Keep a weekly log for each truck, on which you record inspections, lubrications, and cleanings. This

permanent record will help you make sure necessary preventive maintenance functions are performed.

14. The program outlined above is based on one shift a day, and favorable operating conditions. Under rough conditions, such as bad floors, more than average dirt, or more than one shift a day duty, trucks require more frequent use of some or all of these checks. It is wise to consult with the manufacturer's service representative in regard to this.

Greener recommended that truck users treat preventive maintenance as a money-saving part of their operation. Properly conducted, it will permit finding out which operators are not doing their jobs well, which trucks are assigned to jobs for which they are not fitted, and what changes can be made in truck design to improve their utility.

**ECONOMY EQUIPMENT**  
For  
**CANDY and BISCUIT**  
**PLANTS**

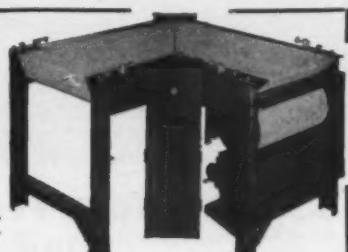
BELTURNS for conveying around a turn without bunching.

• LUSTR-KOOLD chocolate, skinning and sandwich cooling tunnels and conveyors.

• MISC. ITEMS: Packing Tables; Variable Drives; Stainless Steel Hot and Cold Slabs; Stainless Trucks, Pans and Racks.

Also Special Equipment Made to Your Requirements.

**ECONOMY EQUIPMENT COMPANY**  
4800 S. Hoyne Ave.  
Chicago 9, Illinois



## THE Currie HIGH SPEED CANDY CLEANER

- Wide range of adjustment—from smallest to largest pieces.
- Excessive starch carried away by means of vacuum.
- All parts of standard design.
- Placed in operation in matter of minutes—labor saved.
- All bearings sealed—lubricated for life.
- Independent of all other machinery.



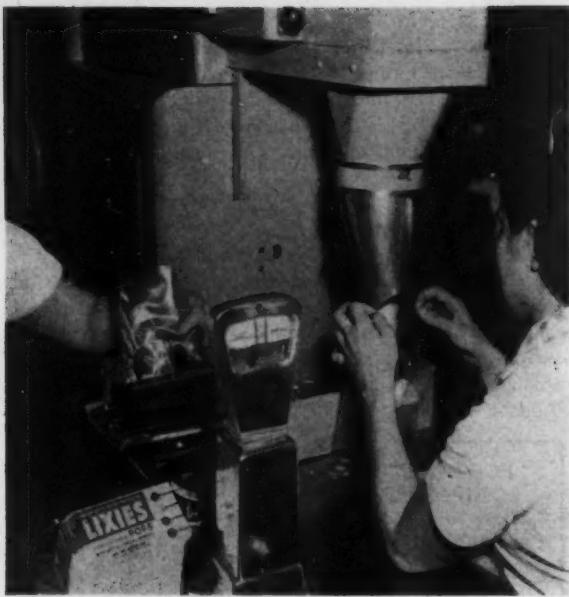
Prompt Delivery  
—wire or write

**CURRIE MANUFACTURING CO.**

Engineers to the Candy Industry

1837 - 43 West Grand Avenue

• Chicago 22, Illinois



*Checkweighing Candy Pops in the F & F Laboratories, Chicago, Ill.*

## Your Fringe Costs - How Much?

Your fringe costs! How much do they add to your present production line costs? This added overhead is ever present when (1) hourly paid labor is not at bench or station in actual productive effort (2) when equipment is inadequate or does not deliver as a smooth efficient operation should. On the labor side with 50% of all productive labor occupied in handling and packaging fringe labor costs can be the first threat to profits. On the equipment side a second threat can be controlled by sound plans, plus equipment to do the job and timing of the production line to fit the personnel. When checkweighing is involved the type of weighing units are vital, too. Use EXACT WEIGHT industrial scales for accuracy, adaptability, dependability, correct capacity and speed of operation. Remember nothing will cut fringe costs more than the right scales in the right place. Their capacity to save time, money, product and labor have been proven numberless times by production-minded engineers everywhere. Write for full details for your plant.

Sales  
&  
Service  
from  
Coast  
to  
Coast

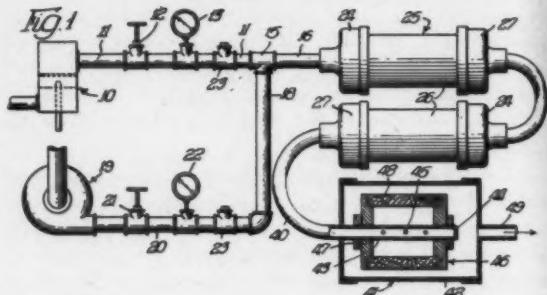
**EXACT WEIGHT SCALES**  
*Industrial Precision*

THE EXACT WEIGHT SCALE COMPANY

912 W. Fifth Ave., Columbus 8, Ohio  
2920 Bloor St., W., Toronto 18, Canada

# Patents

Methods and Apparatus for making Confectionery 2,536,340  
Justin J. Alikonis, Bloomington, Ill., assignor to Paul F. Beich Company, Bloomington, Ill., a corporation of Illinois  
Application July 1, 1947, Serial No. 758,346  
11 Claims (Cl. 107—54)



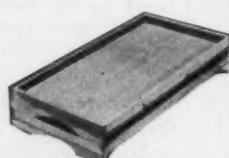
This invention pertains to an improved, simplified and highly efficient method and apparatus for making foam-type confectionery in a continuous, as distinguished from a batch, process. In the (Alikonis) Patent No. 2,424,950, dated July 29, 1947, of which the present application is a continuation-in-part, an improved method and apparatus for the foregoing purpose in which supplies of a relatively viscous liquid confectionery stock and air under pressure are fed together through a porous diffusing agency in a manner to effect a thorough dispersion and diffusion of air globules throughout the mass of confectionery stock is illustrated and described. This produces a frothy candy of improved foamy texture, and the operation involved is greatly simplified and expedited as compared with standard beating procedures heretofore practiced in the manufacture of related products.

Specifically, this invention provides a method and apparatus for initially admixing predetermined proportionate quantities of relatively viscous liquid confectionery stock and air under pressure by jetting operation, for thereafter subjecting the preliminary mixed product to a single or multiple-stage, mechanical agitating and atomizing operation by impingement at relatively high velocity against a fixed target or successive fixed targets, and for finally treating this agitated mixture to further break up and more minutely globulize the air bubbles and to diffuse the same more uniformly throughout the mass of confectionery stock by passage of said preliminary treated mass through a finely foraminated porous diffusing medium of a rigid, fused ceramic nature.

### Starch Trays

- At their best!
- At lowest prices!

Masonite and Solid Wood Glued Bottom Nailed—Lock Corner and Water-proof Glued Hard and Soft Woods



also: Dipping Boards—Starch Tray Dollies Pan Room Trays—Wire Bottom Trays Mould Boards

And All Other Affiliated Wood Products

Ask for quotation

**BAYWOOD MFG. CO., INC.**

11-13 Sterling Pl. Brooklyn 17, N.Y. NE 8-9832

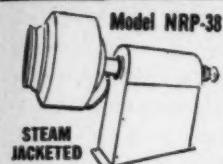
new help to sanitation in candy making . . .

# GROEN

STAINLESS STEEL STEAM JACKETED

## VACUUM PANS

### OTHER GROEN CANDY PLANT EQUIPMENT



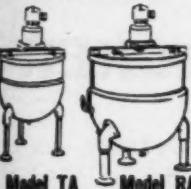
STEAM JACKETED  
REVOLVING PANS



Model LSP—Filter



AGITATOR KETTLES



Model TA  
Twin Shaft

Model RA  
Single Shaft



Model AED—Electric  
DOWTHERM

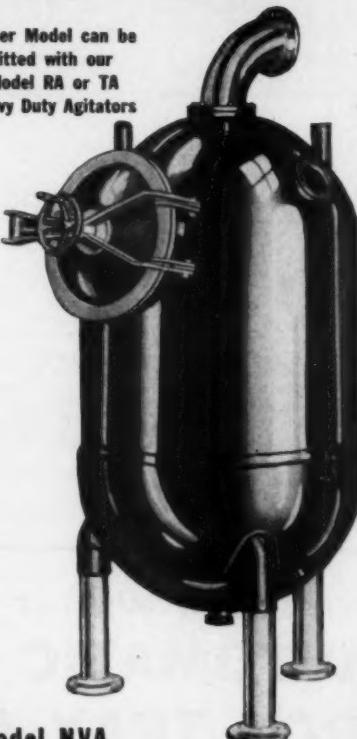
Model AHD—Gas

HI-TEMP.  
KETTLES



Model H  
Kettle

Either Model can be  
fitted with our  
Model RA or TA  
Heavy Duty Agitators



Model NVA

### GENERAL-PURPOSE VACUUM KETTLE

A stationary steam jacketed vacuum cooking kettle intended for general purpose use for fast removal of moisture at low temperature. Excellent craftsmanship and material typical of all GROEN-built units...with thorough sanitation a foremost consideration. A strikingly handsome unit; and its performance is in harmony with its fine appearance.

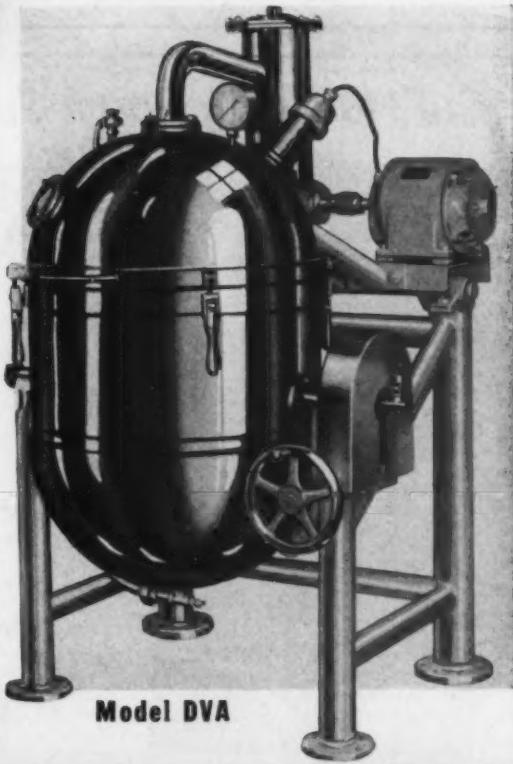
### ТИLTING VACUUM KETTLE

Model DVA, shown at right, is a tilting-type special purpose vacuum cooking unit. Modern sanitary design throughout. Note the clean-cut, streamlined appearance. Observe the open, unhindered accessibility around and under the unit. Nothing to impede easy cleaning. Everything to simplify complete compliance with the most rigid sanitary codes.

GET DETAILS. WRITE FOR  
BULLETIN VP-1

There's half-a-century of experience built into these vacuum kettles. That's why they are both sanitary and efficient to the highest degree . . . with the inherent strength and durability of stainless steel. Used extensively in making many of America's most famous candy brands. Modern, streamlined, uncomplicated in design . . . COMPLYING WITH THE MOST RIGID HEALTH DEPT. REQUIREMENTS, and with today's ideas in candy plant sanitation.

Check into these fine units immediately. See how a GROEN Vacuum Kettle can improve your manufacturing processes. Our new Bulletin VP-1 contains facts and figures that will interest you. Why not write for it now?



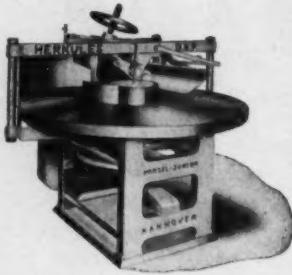
Model DVA

**GROEN MFG. CO., 4529 W. ARMITAGE AVE., CHICAGO, ILL.**

WORLD'S LARGEST PRODUCERS OF STAINLESS STEEL STEAM JACKETED KETTLES

## *If you are anxious to*

- reduce labour and overhead costs
- cut materials wastage
- increase output from your present plant



Then install a  
**HERCULES**  
BATCH KNEADER  
for the  
tough jobs

An exceptionally robust sugar kneader  
of proven design

For detailed information apply to

**HAENSEL-JUNIOR**

Specialized Machinery Works,  
Postfach 516, HANNOVER, Germany  
Agency inquiries invited

## *Liquid Chocolate Tank Truck Developed*

The D. L. Clark Company of Pittsburgh, Pa., maker of the Clark Bar, has announced the adoption of a new method of transporting bulk chocolate.

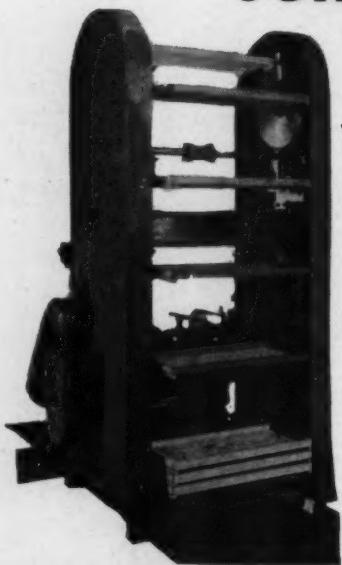
The new procedure was developed after nearly three years of experiments conducted in cooperation with P. E. Kramme, Inc., New Jersey trucking firm. It uses a special heated tank truck in which the chocolate is delivered in a liquid form ready for immediate pumping to the heated storage tanks and, if necessary, right to the enrobers as soon as it reaches the factory.

Several years ago, Mr. David L. Clark, senior vice-president of the big candy firm, suggested that the company attempt to find a way to eliminate the costly wrapping, unwrapping, breaking and remelting of the hundreds of cakes of chocolate that were used every day. Chocolate is in a liquid form as it is completed at the refinery and most candy makers must return it to this form before they can use it. Mr. Clark felt that if the chocolate could be transported as a liquid it could be pumped right into the feed lines inside the building and a lot of expensive operations would be eliminated.

Following the specifications set up by the Clark

## **Cut Handling Costs—Save Labor with a CURRIE AUTOMATIC STARCH TRAY STACKER**

**Order Now for  
Prompt Delivery**



- Gives You Increased Production
- Eliminates Hand Stacking  
(completely automatic)
- Reduces Tray Breakage
- Improves Sanitation

*This is a must for economical operation in high volume production.*

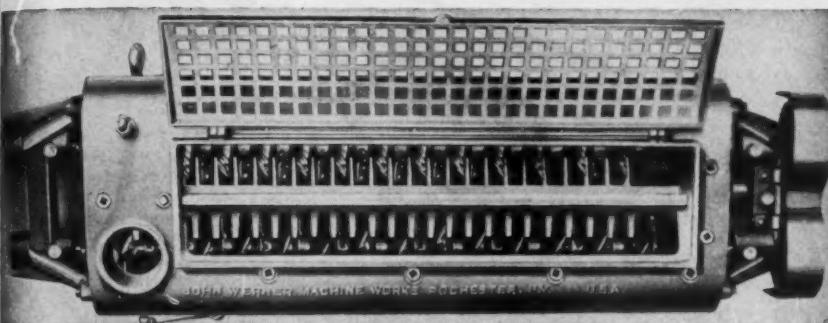
**CURRIE MANUFACTURING COMPANY**

1837-43 Grand Ave.

Engineers to the Candy Industry

CHICAGO 22, ILL.

# THE WORLD'S LOWEST COST PRODUCER OF FONDANT



2 Cylinder Snow Flake Fondant Beater



Peerless Fondant Cooler

## The Greatest name in Fondant Equipment

- Perfect Beating and Cooling, plus super-aeration.
- Frictional heat removal by ventilation and water jacket.
- The Werner "Uniflow Coil" gives uniform cooling, which results in uniform Beating.
- The lowest cost per pound of quality Fondant.
- It's Lifetime equipment.

"There is No Substitute for Experience".

# JOHN WERNER & SONS, INC.

713-729 Lake Ave.

Rochester 13, N. Y.

Company, P. E. Kramme went to work on one of their big milk tankers. Equipped with a double-thick glass lining, the unit was virtually a giant thermos bottle. An automatically-controlled gas-fired heating unit was designed and installed in such a way as to supply heat to a water-filled "blister" on the bottom of the tank. This combination, it was found, was capable of maintaining an almost constant 130-degree temperature in a 25,000-pound load of liquid chocolate. In an eight-hour trip, heat loss has never been more than four degrees.

In addition to reducing costs and increasing handling speed, it is also the most sanitary way yet devised of transporting chocolate. From the time it leaves the refinery until it takes its place on the complete Clark Bar, the chocolate is never touched. A stainless steel pipe that connects with the steam jacketed feed lines inside the plant is coupled to the truck and the chocolate flows direct to the heated storage tanks. Other lines then take it right to the enrobers.

- The Food Machinery and Chemical Company has perfected a process for making synthetic spearmint. The process will bypass the spearmint plant, extracting the flavorful oil instead from orange peels. Several large candy and gum manufacturers are reported dickering for the license.

## PRECISION BUILT ★ STAINLESS STEEL HOPPERS



Precision Built for Lifetime Wear

Made entirely of heavy gauge stainless steel for a lifetime of rugged wear. All corners rounded for easy cleaning. Can be supplied as replacements for all types of depositors.  
Write for illustrated folder today.

Also  
Manufacturers  
of  
Pump Bars  
Depositors  
Starch Machines

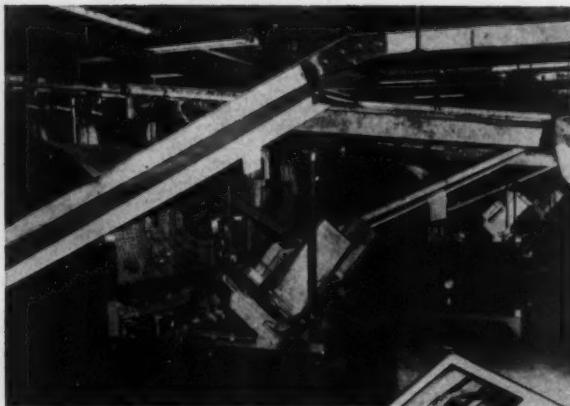
N. Y. Rep. John Sheffman Inc., 152 W. 42nd St.

**MILL RIVER TOOL CO.**  
338 WORTHINGTON ST., SPRINGFIELD, MASS.

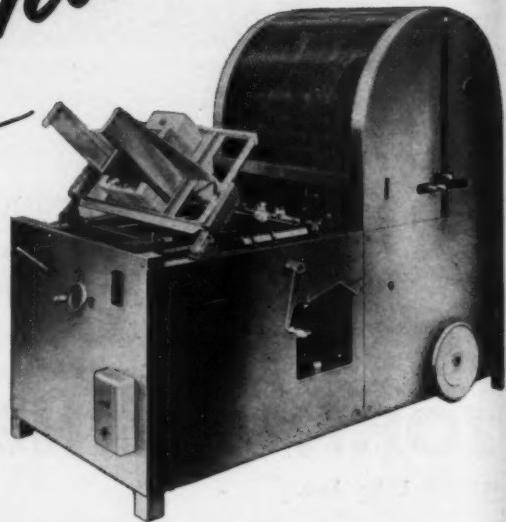


more than a carton  
per second

Made in your own plant  
AT LARGE SAVINGS!



Battery of PA Carton Forming  
Machines in plant of Mars,  
Inc. Machines require no  
operators in attendance.



Our unique Model PA Carton Forming Machine will form and glue up to 102 cartons per minute. The only supervision required is to keep it supplied with blanks. Since the magazine holds from 500 to 1,000 blanks—depending on the style of carton—one person can feed the machine and do other useful work as well!

Due to its advanced design, the Model PA operates on the principle of *continuous motion*. Gluing time is 9 times longer than in other machines, despite its high production speeds, thereby insuring a firmly sealed carton. Due to its improved mandrels and forming plates, cartons are accurately formed to exact dimensions . . . Easily-stored, inexpensive die-cut blanks are used—providing big economies over factory-processed or hand set-up cartons . . . The Model PA occupies only 3' x 6' of floor space and is adjustable for different sizes of cartons in far less time than former machines . . . Cartons come out of the machine right-side up, ready for filling on your production line.

You'll find that many leading manufacturers are now producing cartons on our Model PA. The machine often pays for itself within a few months!

*Write for leaflet on the PA Carton Forming Machine*

**PACKAGE  
MACHINERY COMPANY**  
CARTON DIVISION  
SPRINGFIELD, MASSACHUSETTS

NEW YORK      CHICAGO      BOSTON      CLEVELAND      ATLANTA  
DALLAS      DENVER      LOS ANGELES      SAN FRANCISCO  
SEATTLE      TORONTO      MEXICO, D.F.

# Package Printing Techniques

By DR. A. C. ZETTLEMOYER

National Printing Ink Research Institute

EVEN with the inroads of other printing methods, letterpress still accounts for about 75 percent of the printing of all packaging materials. It permits strong, solid prints, sharp clear-cut effects and excellent multi-color work. New high-speed rotary letterpress machines have been recently put into use for printing labels and cartons. The printing ink makers have been continually improving and developing letterpress inks. The newer developments such as heat set inks have been mainly useful in the publication field where higher printing speeds are required, but as speeds increase in the packaging field to help reduce costs, it is evident that printing inks are available to meet the needs.

Steam set inks used in letterpress printing continue to make remarkable progress in the packaging field. These inks dry due to precipitation of the binder from a glycol type solvent when exposed to steam or even to the moisture in the paper stock. About 50 percent of corrugated boxboard is reputed to be printed with this medium. Furthermore, about 80 percent of all Kraft bag printing and a large majority of bread wraps are now printed with steam set inks. Chief objection to steam set inks is their lack of gloss, but rapid drying, non-toxicity and faintly pleasant odor allows their use to increase.

The expanding use of *Aniline Printing* to about 10 percent of packaging printing continues to be one of the outstanding trends in the production of packaging and wrapping materials. The printing process is essentially letterpress, although the use of alcohol-type solvents and rubber plates have set this process apart. The inks are fluid containing soluble dyes, and now pigments to gain opacity. Most glassine, foil and cellophane wraps are printed with aniline inks on rather simple presses in continuous rolls; often heat is applied just after printing to set the ink into the surface. The new plastic films have entrenched aniline printing further because these difficult surfaces can be handled well if the proper solvent is employed in the ink so that a "bite" into the film occurs.

*The above article is from excerpts of an address by Dr. Zettlemoyer before the 1951 National Packaging Exposition of the American Management Association.*

Even the most difficult film, polyethylene, is now printed with the aniline or the letterpress process.

Of course, polyethylene remains the number one development in plastics for packaging due to its inertness and resistance to vapor transmission. Attention should be directed to the new laminations of polyethylene to paper and boxboard. Films of the order of three-quarters of a mil are extruded and pressed into the paper or boxboard in a continuous process. This technique reduces the amount of polyethylene required and this is a boon because of the tight supply. In addition, the printing can be applied on the outer, paper surface and thus the more difficult film surface can be avoided.

Coverings for set-up boxes have been printed by the aniline process for a number of years and now recently boxboard has been successfully run with this process. Some Kraft and jute liners for corrugated boxes and display cartons are also printed by aniline process. These examples emphasize that aniline printing is no longer restricted to glassine, cellophane and other films and foils.

Nevertheless, like the other processes, the aniline process has its restrictions. It is best suited to solids, lines and type. Coarse halftones can be printed successfully, but process color work is better left to other printing methods.

For gloss and adhesion, shellac has been the resin binder (which holds the pigment to the surface) which has been the most effective. This resin suffers from the disadvantages of being a variable natural product with a fluctuating price. Currently, the National Printing Ink Research Institute is helping to develop Allyl Starch as a substitute. This resin shows ample promise of replacing shellac in some aniline ink applications. This example serves as one sample of the improvements which are under development from the ink formulation point of view.

*Offset Lithography* accounts for only about 5 percent of packaging printing, but it is definitely on the increase. This is because of the minimum amount of "makeready" (preparation of the form for printing), the low cost of the plates and plate preparation (similar to aniline printing), the flexibility of the process which allows corrections to color and text in short time, and the versatility in relation to the surfaces printed. Widely used in tin printing or metal decorating because the ink is printed from a rubber blanket rather than from hard type, it is also used successfully on rough, uncoated paper stocks. Dry offset, plus subsequent baking, has been successfully employed on repeat containers, cylindrical items, molded plastics, as well as films. High production speeds and excellent process color work can be obtained with the lithographic method.

*Rotary Gravure* printing possesses the same advantage as aniline printing in that inilene units such as coating and cutting equipment can be installed. The inks are quite fluid and fast drying allowing many difficult surfaces to be printed with a wide range of tone value. Like aniline, also, less skill is required than for offset or letterpress. About 10 percent of packaging printing is now done by the gravure process. Materials as divergent as boxboard and plastic films are now successfully printed by the gravure process.

Probably the major limitation is that the plates are more expensive to prepare than are those for any other type. Thus, long runs should be anticipated if the process

# Minimum Cost Automatic Wrapping



Automatic wrapping on the Hayssen costs less because the Hayssen requires only a modest capital investment . . . is fully automatic . . . sturdily built for a long operating life . . . and has a minimum of moving parts. Packages are trim in appearance and printed wrappers registered by Hayssen Electric Eye. Write for the Hayssen story and the name of your Hayssen representative.

HAYSSEN MFG. COMPANY • SHEBOYGAN, WIS.



page 40

is employed and changes and corrections must be minimized.

A new development is the adoption of the gravure process for the production of soap cartons. Also, one large bakery turned to the gravure process in a recent advertising campaign to gain a pleasing gradation of tone on their new bread wraps.

*Cost versus Quality*—It would seem ill advised as well as contrary to the fact to state that any one process was ideal and all others less economical for any specific type of work. Even though this may be true for one product under one set of conditions, all that need be done to alter the situation completely is to move it into a differently equipped shop or to a different city.

Cost of ink versus quality is an even more controversial problem. Certainly, inks are a small portion of the cost of a given job and the best job cannot be done with the lowest cost ink. Yet improved quality does not derive alone from the use of quality inks. It must be remembered, too, that ink costs do not set the cost of the job. Offset inks tend to be the most expensive and aniline inks the cheapest, yet this does not necessarily mean that unit costs will be in the same order. Progressive printing establishments are acutely conscious of quality and have established standards on which they buy. The National Printing Ink Institute is helping the ink maker develop test methods and instruments for viscosity, tack, rubproofness of prints and other important properties. These tests will ultimately lead to better inks for the packaging field.

GAIR  
SHIPPING  
CONTAINERS

Eliminate Many  
Hazards of Shipping

Gair Corrugated Containers are so scientifically constructed that they offer the utmost PROTECTION against the many hazards of shipping... truly amazing how they withstand tremendous knocking about and rough usage.

Without obligation Robert Gair offers a helping hand in solving shipping container problems.

WRITE TODAY  
for technical information

\*Reg. U. S. Pat. Off.

ROBERT GAIR COMPANY, INC.  
155 EAST 44TH STREET, NEW YORK • TORONTO  
PAPERBOARD • FOLDING CARTONS • SHIPPING CONTAINERS

THE MANUFACTURING CONFECTIONER

min-  
avure  
, one  
recent  
on of

s well  
process  
specific  
or one  
done  
differ-

rover-  
of the  
e with  
ot de-  
be re-  
of the  
aniline  
mean  
pressive  
quality  
. The  
maker  
, tack,  
erties.  
or the

R

S

are  
hat  
EC-  
rds  
now  
lock

Gair

ving

Y, INC.  
TORONTO  
CONTAINERS

CTIONER

p  
s

1

# preliminary sketches



Quality **OLIVE CAN COMPANY** Service  
MANUFACTURERS AND DESIGNERS OF METAL CONTAINERS  
SINCE 1912

450 N. LEAVITT ST., CHICAGO 12, ILLINOIS

# Sixth Annual PMCA Conference Program

THE Sixth Annual Production Conference of the Pennsylvania Manufacturing Confectioners' Association will be held April 24-25 at Lehigh University. The conference, as in previous years, is especially designed to benefit production department employees, such as superintendents, foremen and assistants, as well as management. Arrangements have been made with the Hotel Bethlehem, Bethlehem, Pa., and the Americus Hotel,

Hans Dresel, conference committee chairman announces the program for the sixth annual production conference of the PMCA at Lehigh University. April 24th and 25th.



Allentown, Pa., for the accommodation of registrants and guests. Reservations must be acknowledged by the Association secretary, Harry H. Rohrer, P. O. Box 163, Elizabethtown, Pa., or the conference chairman, Hans F. Dresel, 15 Lombard St., Philadelphia 47, Pa.

The conference program will be as follows:

## Thursday, April 24:

MODERATOR: Anthony Napolitan, President, Buttonwood Candies, Inc., Reading, Pa.; Chairman, Executive Committee, PMCA.

- 9:00 a.m.—Registration
- 9:30 a.m.—*Introductory Remarks.* C. R. Kroekel, President, Kroekel-Oetinger, Inc., Philadelphia, Chairman, Research Committee, PMCA.
- 9:45 a.m.—*Research and Industry.* Dr. H. A. Neville, Director, Institute of Research, Lehigh University, Bethlehem.
- 10:00 a.m.—*Butter Flavors in Confectionery.* Dr. Morris B. Jacobs, Adjunct Professor of Chemical Engineering, Polytechnic Institute of Brooklyn, Brooklyn, N. Y.
- 10:30 a.m.—*Certified Food Colors for the Candy Industry.* William J. Miles, Production Supervisor, The Hilton-

## BURCO Products . . . "BEST by TEST"

**NU-KREME**—Grade A of all Nougat Creams.

**DIPPING PIECES**—Molasses Honeycomb Chips, Peanut Butter Chips, Toasted Cocoanut Chips, Chocolate Center Chips, Almond Butter Sticks, Mint Pillows and Peanut Butter Pillows.

**BURCO NOUGAT CREME**—The All Purpose Nougat Cream.

**TOPPINGS**—Marshmallow, Butterscotch, Caramel and Chocolate Fudge.

Formula Book "Recipes for Better Candies" sent with initial order

**CONFECTIIONERS PECTIN**—For Cut Slab Jellies.

**NU-MILK**—Whole Milk in Plastic form for Caramels and Fudges.

**FRESH COCONUT PASTE**—Ready to use for Chocolate or Bon Bon Centers.

**PECTOLENE**—A Pectinized Invert Sugar Product.

**CENTER-ROLL KREME**—for Soft-flowing Creams.

**KREME-TEX**—For Creamy Fudge and Caramels.

**BURKE PRODUCTS CO., INC.**  
317 W. HUBBARD STREET \* CHICAGO 10, ILLINOIS

Davis Chemical Co., Division of Sterling Drug, Inc. (Mfg. Agents of Certified Food Dyes for Sterwin Chemicals, Inc., New York).

- 11:00 a.m.—Recess.
- 11:15 a.m.—*The Role of Antioxidants in Prolonging the Shelf-Life of Fat-containing Candies.* Helen M. Robinson, Chemist, Agricultural Chemical Research Division, U. S. Department of Agriculture, New Orleans, La.
- 11:45 a.m.—*Practical Aspects of Antioxidants in the Confectionery Field.* Harry E. Whitmore, Sales Manager in charge of Food Antioxidants, Universal Oil Products Company, Chicago.
- 12:00 noon—Discussion.
- 12:30 p.m.—*Plant Designs and Layouts.* Gilbert I. Ross, President, Ross & Company, New York.
- 1:00 p.m.—Luncheon (on the campus)
- 2:00 p.m.—*Work Simplification—Everybody's Job.* Joseph R. Ryan, Supervisor, Work Simplification and Industrial Engineering Research, The Atlantic Refining Company, Philadelphia.
- 2:30 p.m.—*Selection of Air and Refrigeration Systems.* V. P. Victor, Consulting Engineer, New York.
- 3:00 p.m.—Recess
- 3:15 p.m.—*A Briefing on Chocolate Manufacture.* L. Russell Cook, Technical Director, Ambrosia Chocolate Co., Milwaukee
- 3:45 p.m.—*Symposium—Chocolate.*  
Participating:  
MODERATOR: L. Russell Cook  
E. M. Meyers, Chief Chemist, Hershey Chocolate Corp., Hershey, Pa. W. Tresper Clarke, Chief Chemist, Rockwood & Co., Brooklyn, N. Y. R. C. Welch, Wilbur-Schardt Chocolate Co., Inc., Lititz, Pa.
- 5:00 p.m.—Adjournment.
- 7:00 p.m.—The Pennsylvania Manufacturing Confectioners' Association Dinner (Dress Informal) Hotel Bethlehem, Bethlehem, Pa. Pennsylvania Dutch Dinner, Hans F. Dresel, Representative, Felton Chemical Co., Phila., Chairman, Sixth Annual Production Conference. Mark J. Heidelberger, Heidelberger Confectionery Co., Philadelphia, President, Pennsylvania Manufacturing Confectioners' Association, Toastmaster. Address: Philip P. Gott, President National Confectioners' Association.

## Friday, April 25:

MODERATOR: David Sykes, Plantation Chocolate Co., Philadelphia, First Vice-president, PMCA.

- 9:00 a.m.—*Tarpaulin and Spot Fumigation in the Candy Industry.* J. L. Maxwell, Manager, Fumigant Sales Division, Dow Chemical Company, Midland, Michigan.
- 9:30 p.m.—*Sugar—Its Uses and Abuses in the Candy Plant.* Louis Lang, National Sugar Refining Company, Philadelphia.
- 10:00 a.m.—*Properties of Products from Corn of Interest to Candy Makers.* Dr. J. M. Newton, Director, Technical Sales Service, Corn Processing Division, Clinton Foods Inc., Clinton, Iowa.
- 10:30 a.m.—*Sweetener Discussion.* Participating: MODERATOR: C. R. Kroekel; Edward W. Meeker, Technical Sales Representative, The American Sugar Refining Company, New York; Louis Lang; Dr. J. M. Newton; John Kooreman, Sales Engineer, Penick & Ford Ltd., Inc., Cedar Rapids, Iowa
- 11:00 a.m.—Recess.
- 11:15 a.m.—*New Aspects of Cooking Starch Jellies Continuously.* Participating: Dr. T. A. White, Chief Chemist, National Starch Products, Inc., New York, "Theoretical Aspects". Vincent R. Ciccone, Asst. Works Mgr., Charms Co., Bloomfield, N. J., "Practical Aspects".
- 11:45 a.m.—*The Evolution of Candy Formulas, Marshmallow and Nougat.* James A. King, The Nulomoline Div., American Molasses Co., New York.
- 1:00 p.m.—Luncheon (served on the campus).
- 2:00 p.m.—Round Table Discussion (Directed by James A. King)
- 3:00 p.m.—Recess
- 5:00 p.m.—Adjournment.

The MANUFACTURING CONFECTIONER'S

# Candy Clinic

The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availling themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of The MANUFACTURING CONFECTIONER.

## Holiday Packages: Hard Candies

Code 1A52

**Cellulose Shoe of Hard Candy**  
Crystal Rock  
6 ozs for 25c

(Purchased in a department store, Chicago, Ill.)

**Appearance of Package:** Good.

**Container:** Cellulose shoe printed in red, green and white. White paper clip on top printed in red and green. Pieces are wrapped in cellulose.

**Candy:**

Colors: Good.

Gloss: Good.

Texture: Good.

Flavors: Good.

**Remarks:** Neat and attractive Christmas candy novelty. One of the best we have examined.

Code 1B52

**Hard Candy Pop Novelty**  
2½ ozs. for 29c

(Purchased in a department store, Chicago, Ill.)

**Appearance of package:** Good.

**Container:** Large folding box, 10" by 9½" by ¾". 5 holes on each side, pops showing through. Imprint of Santa Claus head in red, white and green. Box printed in red, white and blue. 10 pops secured to printed board. Cellulose wrappers.

**Pops:**

Colors: Good.

Gloss: Good.

Texture: Good.

Flavors: Good.

**Remarks:** The best novelty at this price we have examined. Very large looking and makes a good appearance.

Code 1C52

**Assorted Filled Hard Candies,**  
Plastic Type  
1 lb. for 39c

(Purchased in a drug store, Chicago, Ill.)

**Appearance of package:** Good.

**Container:** Cellulose bag white paper clip on top printed in red and green.

**Hard Candies:**

Molding: Good.

Colors: Good.

Stripes: Good.

Gloss: Good.

Jacket: Good.

Centers: Good.

Flavors: Good.

**Remarks:** Good eating for this price filled hard candies. Cheaply priced at 39c the pound.

### Candy Clinic Schedule

### For The Year

The monthly schedule of the CANDY CLINIC is listed below. When submitting items, send duplicate samples six weeks previous to the month scheduled.

**JANUARY**—Holiday Packages; Hard Candies

**FEBRUARY**—Chewy Candies; Caramels; Brittles

**MARCH**—One-Pound Boxes Assorted Chocolates up to \$1.00.

**APRIL**—\$1.00 and up Chocolates; Solid Chocolate Bars

**MAY**—Easter Candies and Packages; Moulded Goods

**JUNE**—Marshmallows; Fudge

**JULY**—Gums; Jellies; Undipped Bars

**AUGUST**—Summer Candies and Packages

**SEPTEMBER**—Bar Goods; 5c Numbers

**OCTOBER**—Salted Nuts; 10c-15c-25c Packages

**NOVEMBER**—Cordial Cherries; Panned Goods; 1c Pieces

**DECEMBER**—Best Packages and Items of Each Type Considered During Year; Special Packages, New Packages

# SPEAS

APPLE PRODUCTS

the Standard of Quality  
for sixty years

NUTRL-JEL

for preserves, jams,  
jellies, marmalades

CONFECTO-JEL

for jellied candies

**CONFECTO-JEL**—a buffered  
apple pectin mixture for  
jellied candies—ready for  
use.

CONCENTRATED APPLE JUICE

Plants in Apple Regions From the Atlantic to the Pacific

SPEAS COMPANY, General Offices, Kansas City 1, Missouri



Code 1D52  
Christmas Stocking  
1 1/4 ozs. for 10c

(Purchased in a department store, Chicago, Ill.)

**Appearance of Stocking:** Good.  
**Size:** Good for a 10c seller.  
**Stocking:** Red mesh bound in red and white. Paper Santa Claus clip printed in red and green. 7 pieces of hard candy in cellulose wrappers.  
**Candy:**  
**Colors:** Good.  
**Gloss:** Good.  
**Texture:** Good.  
**Flavors:** Very little used.  
**Remarks:** A good looking Christmas novelty at this price.

Code 1E52  
Plastic Filled Hard Candies  
1 lb. 4 ozs. for 69c

(Purchased in a department store, Chicago, Ill.)

**Appearance of package:** Good.  
**Container:** Can printed in yellow, blue and red. Imprint of candies in colors.  
**Candy:**  
**Colors:** Good.  
**Molding:** Good.  
**Gloss:** Good.  
**Jacket:** Good.  
**Centers:** Good.  
**Flavors:** Good.  
**Remarks:** Well made hard candy. Very good eating. Neat and attractive container.

## Ferbo CAKE FLAVOR

A Ferbo Specialty Flavoring that imparts a Rich and Delicious taste characteristic of a mixture of Butter and Cream and Caramel and Vanilla. Used extensively by both the Bakery and Confectionery trades. Sample upon request.



**Code 1F52**  
**Assorted Hard Candies**  
**1 lb. for 29c**

(Purchased in a drug store, Chicago, Ill.)

**Appearance of package:** Good.  
**Container:** Cellulose bag, white paper clip on top printed in red and green.  
**Hard Candies:**  
Colors: Good.  
Gloss: Good.  
Stripes: Good.  
Texture: Good.  
Flavors: Good.  
**Remarks:** The best assorted hard candies we have examined for some time at the price of 29c the pound.

**Code 1G52**  
**Candy Canes**  
**18% ozs. for 39c**

(Purchased in a drug store, Boston, Mass.)

**Appearance of package:** Good.  
**Container:** Square box, large cellulose window. Box tied in red. 17 canes each in a cellulose wrapper printed in red, green and white. Imprint of bells and leaves in colors.  
**Canes:**  
Color: Good.  
Stripes: Good.  
Shape: Good.  
Texture: Good.  
Flavor: Fair.  
**Remarks:** The best box of canes we have examined at this price. Neat and attractive package. Suggest again as much flavor be used.

**Code 1H52**  
**Christmas Tree Coated**  
**Marshmallow Bar**  
**1 1/4 ozs. for 5c**

(Purchased in a department store, Chicago, Ill.)

**Appearance of package:** Good.  
**Wrapper:** Cellulose wrapper, imprint of Christmas tree in green, red and white.  
**Size:** Good.  
**Bar:**  
Coating: Fair.  
Shape: Good.  
Center:  
Color: Good.  
Texture: Fair.  
Taste: Fair.  
**Remarks:** A good looking printed cellulose wrapper.

**Code 1I52**  
**Coated Marshmallow**  
**Santa Claus Bar**  
**1 oz. for 5c**

(Purchased in a department store, Chicago, Ill.)

**Appearance of package:** Good.  
**Wrapper:** Cellulose wrapper, imprint of Santa Claus in red, green and white.  
**Size:** Good.  
**Bar:**  
Coating: Fair.  
Center:  
Color: Good.

**Texture:** Good.  
**Taste:** Fair.  
**Remarks:** A good looking 5c Christmas novelty.

**Code 1J52**  
**Mint Mixture**  
**14 ozs. for 82c**

(Purchased in a candy store, Chicago, Ill.)

**Appearance of package:** Good.  
**Container:** Box, one layer type, white glazed paper printed in green, and gold. Spray of mint in colors. Cellulose wrapper.  
**Appearance of box on opening:** Good.  
**Assorted crystal cream wafers:** Good.  
**Assorted crystal cream leaves:** Good.  
**Crystal cream daisies:** Good.  
**Licorice drops:** Good.  
**Mint gums:** Good.  
**Opera gums:** Good.  
**Assorted panned cream drops:** Good.  
**Assortment:** Good.  
**Remarks:** One of the best mint assortments we have examined in some time. Good workmanship.

**Code 1K52**  
**Kiddie Box**  
**6 ozs. for 49c**

(Purchased in a railroad depot, Chicago, Ill.)

**Appearance of package:** Good.  
**Container:** Box, one layer type, white paper top, cowboy scene in colors, imprint of pops in colors. Cellulose wrapper.  
**Appearance of box on opening:** Good.  
**Pops in colored cellulose wrappers:** Good.  
Solid chocolate animal: Good.  
Crystal cream cats in colors: Good.  
Gum animals in colors: Good.  
Hard candy stick, cellulose wrapper: Good.

**Remarks:** One of the best kiddie packages we have examined. The candies were well made and good eating.

**Code 1L52**  
**Candy Cane**  
**5c**

(Purchased in a drug store, Chicago, Ill.)

**Appearance of cane:** Good.  
**Size:** Good.  
**Wrapper:** Plain cellulose wrapper, no name, address or ingredients on wrapper.  
**Cane:**  
Stripes: Good.  
Colors: Good.  
Shape: Good.  
Texture: Good.  
Flavor: Good.  
**Remarks:** A good looking cane. Cheaply priced at 5c.

**Code 1M52**  
**Creams & Jellies**  
**1 lb. for 27c**

(Purchased in a drug store, Chicago, Ill.)

**Appearance of package:** Good.

**LOWER COST  
AND  
SMOOTHER BOTTOMS  
ON YOUR PIECES  
ARE THE REASONS  
FOR THE WIDE USE  
OF  
"AGATE"  
DIPPING PAPER**

**USE IT OVER  
AND OVER  
AND OVER  
UP TO 10 TIMES  
AND MORE**

**STRONG BACK—  
SMOOTH, HARD  
SURFACE**

**SAMPLES FREE  
STATE SIZE**

**Matthias  
PAPER CORP.**

**165 W. BERKS STREET  
PHILADELPHIA 22, PA.**

**FANCY PAPERS FOR  
WRAPPING AND  
LINING BOXES  
CHOCOLATE LAYER  
BOARD**

**PRIVATE DESIGNS  
MADE TO ORDER**

*Sample books on request*



## BOB KENNY SAYS:

"Wilbur's slice of the coating business is going to be bigger than ever in the New York area in 1952."

Bob Kenny is the Eastern Representative of Wilbur Suchard Bulk Sales with office in New York City. He has had a quarter century of experience selling chocolate products to the confectionery, bakery and ice cream industries.

# WILBUR CHOCOLATE COATINGS

**WILBUR SUCHARD CHOCOLATE COMPANY, INC. • LITITZ, PA.**

**Container:** Printed cellulose bag in white and red. Paper clip on top, white printed on red.

**Jellies:**

**Colors:** Good.  
**Sugaring:** Good.  
**Texture:** Good.  
**Flavors:** Good.

**Creams:**

**Colors:** Good.  
**Texture:** Good.  
**Flavors:** Good.

**Remarks:** The best package of this kind we have examined. Cheaply priced at 27c the pound.

**Code 1N52**  
**Assorted Crystallized Cream Wafers**  
**4½ ozs. for 39c**

(Purchased in a railroad depot, Chicago, Ill.)

**Appearance of package:** Good.  
**Container:** White board tray, overall cellulose wrapper printed in red, green and white.  
**Number of pieces:** 21

**Candies:**

**Colors:** Good.  
**Crystal:** Good.  
**Texture:** Good.  
**Flavors:** Good.

**Remarks:** A well made crystal cream. Slightly high priced at 4½ ozs. for 39c.

**Appearance of Box on Opening:** Good.  
**Number of Pieces:** 40.

**Coating:** Milk.

**Color:** Good.  
**Gloss:** Good.  
**Taste:** Good.  
**Center:**  
**Color:** Good.  
**Texture:** Good.  
**Taste:** Good.

**Remarks:** A very fine butter toffee of good quality and very good eating. This package should show a good repeat business, but we suggest that the candy be called butter almond crunch as the consumer considers a toffee a hard and chewy piece.

### CODE DATING CANDY BARS

Automatic—Any Speed  
5 to 10 Built-in Digits  
Permits quality control and proper stock identification

**KIWI CODERS CORP.**  
3804-06 N. Clark St., Chicago 13, Ill.

The following items were sent to CANDY CLINIC for analysis and comment and therefore do not come under this month's heading.

**Code 12A-51**  
**Almond Butter Toffee**  
**1 lb—No price stated**

Sent in for analysis #4738

**Appearance of Package:** Good.  
**Box:** One layer type, white glazed paper top printed in brown. Cellulose wrapper, outside wrapper light brown paper.

**STANcase**  
EQUIPMENT

**STAINLESS STEEL DRUMS**

**MODEL 30--30 GAL.**  
**MODEL 55--55 GAL.**  
(Covers available)

**ECONOMY EQUIPMENT**

RUGGEDLY CONSTRUCTED FOR LIFE TIME WEAR.  
FULLY APPROVED BY HEALTH AUTHORITIES.

Manufactured by  
**The Standard Casing Co., Inc.**  
121 Spring St., New York 12, N.Y.

# Distribution • Sales • Advertising

• **Karl Fazer and Finlandia** confections will soon be produced in the United States, according to recent reports. Gregg International, presently sole importers and distributors for Fazer in America, is expected to build a factory in Connecticut sometime this year. Fazer presently operates a factory in Stockholm, Sweden, and a plant in Helsinki, Finland.

In anticipation of the move, Fazer has appointed Gregg International to set up broker and wholesale connections throughout the United States. A. Urban Shirk, general sales manager for Gregg International, and president of National Marketing, Inc., has already completed field work contacts in the western New York area, Cleveland, Detroit, and far western markets.

The expansion move is presumed to be a result of the ready public acceptance of the here-to-for imported Finlandia products.

• **McCall's Magazine**, in conjunction with the Stevens Candy Kitchens, of Chicago, came up with one of the year's best candy promotion ideas in its "Candy Carrousel", featured in the December issue. Slanted toward the Christmas trade, the magazine featured a picture of the miniature candy merry-go-round on the front cover and presented instructions for making it on an inside page. The carrousel featured gingerbread animals prancing over a marshmallow floor, studded with peppermint drops, beneath a colored sugar-crystal canopy supported by red and white candy canes.

The colorful miniature can be made right in the consumer's home from the directions. In cooperation with the magazine, the Stevens Kitchens designed a ready made box containing all the candy ingredients needed. These were placed on direct sale for \$3.95, or \$4.00 by mail.

The idea grew from the success, last year, of McCall's "Gingerbread House" pattern, and was worked out in their food laboratories. The pattern for the carrousel went on sale in 7000 department and specialty stores on the date the December issue went on sale. Promotional material, featuring the carrousel and aimed at selling ingredients for it, was distributed to more than 6,000 stores and supermarkets, while more than 1000 candy outlets handled the special McCall's Merry-Go-Round assortment box prepared by the Stevens Kitchens.

• **M & M, Ltd.** will begin sponsoring a new 30 minute TV show sometime in January. The new show, named "Candy Carnival," will plug the M & M bagged candy line and will be directed primarily at children.

• **Thos. D. Richardson Co.** has a bright new trade mark for its packages. The new mark, the first basic company identification change in 50 years, features

a large R, whose upright is a striped candy stick, set in a dark rectangle. The familiar "U•ALL•NO" and the Richardson signature are placed above and below the R.

Beneath the rectangle, a colored ribbon bears the name of the candies inside. In three colors, the new mark can be altered on the different packages to harmonize with the candies visible through the cellophane.

• **The Joyva Candies' Sultan**, who appears on all the candy products manufactured by Independent Halvah & Candies, Inc., has now come to life in a television show, "The Joyva Sultan of Magic", every Sunday at 3:15 P.M., through WPIX-TV.

The series, which started December 2, will continue as a regular feature.

Star of the new show, performing the title role of "The Joyva Sultan of Magic", is Zovello, the magician, whose sleight-of-hand has won him national recognition on the stage, television and in national magazines such as "Look", which have done feature stories about his amazing tricks.

• **Hodge Podge and Likoris Mix** all sorts assortments of the National Licorice Company are now appearing in new carton packages. The new cartons feature cellophane window fronts and are designed so that they may be displayed vertically, thereby taking up less shelf space. The companion designs of the two cartons afford a double value appeal when displayed side by side on a shelf.

The company is also introducing an item known as Y & S Eats, a cellophane bag imprinted in red and green and containing a black and white 5-ounce assortment of three different pieces, twist cuts, seven-up cuts and cream rock.

• **The Sweets Co. of America** has recently given some of its advertising space to the promotion of the Damon Runyan Cancer Fund. In full page ads featuring the comic strip character "Captain Tootsie", the company lauded the action of middle-weight boxing champion Sugar Ray Robinson in donating the proceeds of one of his fights to the cause.

• The nine leased candy departments operated by Old Dominion Candies, Inc., in Roanoke and Lynchburg, Va.; Greensboro, Ashville, Burlington, and Charlotte, N. C.; Columbia and Greenville, S. C.; and Knoxville, Tenn., have been purchased by V. B. Zollman, former vice-president and sales manager for the company.

In addition to these departments, Zollman is opening new departments in Wilmington and Winston-Salem, N. C. this month. He expects to add as many as six to ten new departments to the group within the next year.

# National Advertising

The following National Advertising listings have been compiled and arranged as an informative service to the confectionery industry.

Information on magazine advertising expenditures is printed by The MANUFACTURING CONFECTIONER with the special permission of Publishers Information Bureau.

The radio advertising table is compiled and arranged by the staff of The MANUFACTURING CONFECTIONER from network and private sources.

These listings have been a regular feature of The MANUFACTURING CONFECTIONER publications since May, 1951.

## Magazines

OCTOBER

Advertiser	Magazines	October Expenditure	Total This Yr.	Total 1950
Fred W. Amend Co. (Chuckles)	Last advertised in January	\$	\$ 1,195	\$ 5,564
Burrinini Candy Co.	Last advertised in April		3,170	8,152
Beech-Nut Packing Co. (Beech-Nut Gum)	Everywoman's Magazine—2,300; Family Circle Magazine—5,665; Life—26,900; Woman's Day—6,320; N. Y. Times Magazine—545	41,730	97,080	57,520
Blumenthal Brothers	Last advertised in May		2,605	6,030
Blum's Confectionery	New Yorker Magazine	328	2,668	
E. J. Brach & Sons	Collier's—6,700; Good Housekeeping—8,003; Ladies' Home Journal—11,299; McCall's Magazine—8,470; Saturday Evening Post—7,675; Woman's Home Companion—8,150	50,297	62,017	53,020
Brown & Haley Candy Co. (Almond Roca)	Saturday Evening Post	1,545	17,115	27,567
The Cracker Jack Co. (Campfire & Angelus Marshmallows)	See December issue		50,414	54,047
Cresca Co., Inc. (Lindt Candy)	Cue—165; New Yorker—394; Town & Country—125; Vogue—375	1,059	4,947	7,161
Cresca Co., Inc. (Pascall Candy)	New Yorker—659; N. Y. Times Magazine—597	1,256	1,748	
Crosse & Blackwell Co. (Keiller's Candy)	New Yorker—788; N. Y. Times Magazine 193	981	5,347	9,167
Curtiss Candy Co. (Baby Ruth & Butterfinger bars)	Better Living—5,475; Boy's Life—3,000; Scholastic Magazines—3,500	11,975	95,858	29,702
DeMet's, Inc. (Turtles)	Last advertised in April		6,180	3,500
Flavours Candy Co.	Life	455	455	3,645
Frank H. Fleer Corp. (Fleer's Bubble Gum)	Collier's—2,150; Life—7,455; Look—2,720; Saturday Evening Post—3,090	15,415	41,755	
John O. Gilbert Chocolate Co.	Gourmet	660	3,520	3,300
Henry Heide, Inc.	Life—2,485; Saturday Evening Post—1,545	4,030	50,785	57,985
The Kroger Co.	Family Circle Magazine	2,460	2,460	
Life Savers Corporation	Life—26,900; Look—13,900; Saturday Evening Post—17,100	57,900	363,665	336,245
Mars, Inc.	Look	9,235	178,330	144,154
National Dairy Products Corp. (Kraft Caramels)	Last advertised in June		61,300	70,375
New England Confectionery Co. (Necco Candies)	Collier's	12,150	116,030	89,680
Pangburn Co.	Look	1,360	1,360	
Peter Paul, Inc. (Mounds & Almond Joy Bars)	Better Living—4,752; Everywoman's Magazine—4,320	9,072	227,205	222,929
Planters Nut & Chocolate Co.	Scholastic Magazines—3,470; Woman's Home Companion—8,150	11,620	122,568	194,831
Thomas D. Richardson Co.	Saturday Evening Post	9,625	59,455	102,005
Rockwood & Co. (Rockwood Wafers)	Look—2,650; Saturday Evening Post—3,006; Parade—2,600	8,310	89,265	144,606
Safeway Stores, Inc. (Roxbury Candy)	Family Circle Magazine	5,200	5,200	
Frank G. Shattuck Co. (Schrafft's Chocolates)	Saturday Evening Post	9,625	48,455	
Sophie Mae Candy Corp.	Everywoman's Magazine—563; Family Circle Magazine—1,058; Life—1,819; Saturday Evening Post—1,000; Woman's Day—1,200	5,640	15,190	2,421

<b>Sweets Co. of America, Inc. (Tootsie Rolls)</b>				
Boy's Life—504; Seventeen—725; Puck—14,500	<b>Total</b>	15,729	43,659	57,960
<b>Switzer's Licorice Co.</b>				
Dell Modern Group—1,050; Everywoman's Magazine—790	<b>Total</b>	1,840	45,570	38,355
<b>James O. Welch Co.</b>				
Better Living—3,450; Good Housekeeping—6,250; Life—25,128	<b>Total</b>	34,828	134,608	104,670
<b>Stephen F. Whitman &amp; Son, Inc.</b>				
Cosmopolitan—7,600; Life—26,900; Saturday Evening Post—17,100	<b>Total</b>	51,600	321,530	408,005
<b>Wilbur-Schardt Chocolate Co., Inc.</b>				
First 3 Markets Group—10,620; This Week Magazine—11,580	<b>Total</b>	22,200	32,820	
<b>William Wrigley, Jr., Co.</b>				
Better Living—3,860; Everywoman's Magazine—3,450; Family Circle Magazine—7,133; Parents' Magazine—3,615; Today's Woman—2,015; Woman's Day—7,383	<b>Total</b>	27,456	240,108	198,361
<b>Zion Industries, Inc.</b>				
Last advertised in March			105	
<b>Total October Magazine Expenditure</b>		425,581	2,555,742	2,442,957

## Radio and Television

NOVEMBER

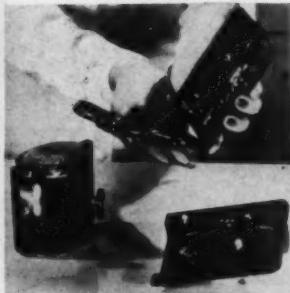
Sponsor	Network	No. of Stations	Time
American Chicle Co. (Beeman's, Chiclets, Dentyne gum)	ABC	220	13 ½-hour shows
Campana Sales Co. (Ayd's Vitamin Candy)	ABC	175	9 5-min. spots
D. L. Clark Co.	NBC	47	5 ¼-hour shows
Gold Medal Candy Co.	DuMont-TV	WABD (local)	1 min. spots
Hollywood Candy Co.	NBC-TV	WNBT (local)	4 ¼-hour shows
Johnson Candy Co.	ABC-TV	27	4 ½-hour shows
Kraft Candy Co.	DuMont-TV	31	4 ½-hour shows
Mars, Inc.	Mutual	529	9 ¼-hour shows*
M & M, Ltd.	CBS	149	4 ½-hour shows
Mason, Au & Magenheimer	ABC-TV	42	8 ¼-hour shows*
Peter Paul, Inc.	CBS	45	4 ¼-hour shows*
Williamson Candy Co.	ABC-TV	20	4 ¼-hour shows
William Wrigley, Jr., Co.	CBS	14 (Pacific)	14 10-min. newscasts
	NBC-TV	39	5 ¼-hour shows
	Mutual	517	4 ½-hour shows
	CBS-TV	9	4 ½-hour shows
	CBS	178	8 ½-hour shows

\*Program is co-sponsored

### ABAR MODERN PLASTICS CANDY MOULDS

#### A REVOLUTION IN CHOCOLATE MOULDING

Such Outstanding Features As



- Economy
- New Built In Snap Lock Spring Clamps
- New Stand
- Sharp Parting Lines

Immediate Delivery on  
CHICKEN-IN-NEST MOULD  
RABBIT-IN-NEST MOULD  
RABBIT SITTING MOULD

For complete information write

**ABAR PLASTICS COMPANY**

6940 Formosa Way, Pgh. 8, Pa.

"COOPER STYLED FOLDING CANDY BOXES ARE DESIGNED FOR EXTRA SALES AT SWEETHEART TIME"



When Cupid is at work creating candy buyers—Cooper Valentine Boxes attract them to your windows and counters.

Cooper Boxes are designed to stop shoppers—make them want the box as well as the candy.

You'll be Cupids profit-making partner when you display a full assortment of Cooper Valentine boxes.



Write or wire for illustrated price list today.

**COOPER PAPER BOX CORP.**

Dept. "M"

Buffalo 4, N. Y.



by  
*Ambrosia*  
FOOD OF THE GODS

AMBROSIA CHOCOLATE COMPANY • MILWAUKEE 3, WISCONSIN

## Confectioners' Briefs

- Nutrine Candy Co. stockholders have voted 351,232 to 3,120 shares in favor of the plan for dissolution at a special meeting.

As announced in the December issue of *THE MANUFACTURING CONFECTIONER*, the inventory, trade names, good will and certain assets of Nutrine are being taken over by the Chase Candy Co., of St. Louis.

The combination of Chase's approximately \$12,000,000 sales per year, and Nutrine's \$4,000,000 sales per year will make Chase one of the three top general line houses in the nation. Neal V. Diller, formerly president of Nutrine, is the new president of Chase. W. A. Yantis, formerly president of Chase became vice chairman of the board. Roy Turner, former salesmanager of Nutrine, becomes a Chase vice president.

Nutrine candy, manufactured in the Chase plant

KIDS and KANDY

Just ANY Flavor  
Won't Do...

TRUTASTE FLAVORS

... BRING 'EM BACK FOR MORE!

NEUMANN • BUSLEE & WOLFE, Inc.

Telephone RODNEY 3-1130

5800 NORTHWEST HWY.

CHICAGO 31, ILLINOIS

# *Crunchy Chips for Dipping*

FILLED MOLASSES CREAM CHIPS  
FILLED RASPBERRY CREAM CHIPS  
FILLED LEMON CREAM CHIPS

110-120 Count per pound

Packed in 16 pound Heat Sealed Polyethylene lined Kraft Bags.  
One bag per carton.

**SESAME DISKS**—a unique piece that tastes excellent dipped in dark or milk chocolate. 160 count. Packed in 13 pound tins.

**RASPBERRY and COFFEE CORDIALS.** Liquid centers, pillow shape 100 count, packed in 15 pound heat sealed Polyethylene lined Kraft bags—One bag per carton.

**PEANUT BUTTER STICKS, CRUNCHY, FULL FLAVORED**  
120 count, packed in 15 pound heat sealed Polyethylene lined Kraft bags—One bag per carton.

WRITE FOR SAMPLES AND PRICES

## **heller CANDY CO., INC.**

MAKERS OF UNUSUAL HARD CANDIES

132 BECKWITH AVENUE

PATERSON, NEW JERSEY

in St. Louis, will be warehoused in the former Nutrine factory at Chicago and will be shipped from that point to Nutrine customers. The Chase and Nutrine sales organizations are being merged to provide more thorough coverage throughout the country.

The merger was accomplished through the purchase, by F. S. Yantis & Co., Chicago, owner of 40 percent of Chase common stock, of substantially all of the 400,000 outstanding shares of Nutrine stock at \$5 per share.

• **The Delson Candy Company** has purchased a substantial interest in Ohio Confection Company of Cleveland. No change in the management of either company is contemplated. Charles R. Adelson, the senior partner of the Delson Candy Co., has succeeded J. Roy Allen as Chairman of the Board of the Ohio Confection Co.

• **Merley Candy Co.** of Pasadena, Calif., recently manufactured the "World's Largest Real Candy Cane" for a pre-Christmas promotional stunt by the Downtown Business Men's Association of Los Angeles.

The cane had a 21-foot over-all length and an 8-inch diameter. Manufacturing problems necessitated its being cooked in sections, then welded together.

The cane was displayed in a public square in downtown Los Angeles until just before Christmas, when it was divided up and donated to a childrens home.

• The Bureau of the Census, Department of Commerce, estimates manufacturers' sales of confectionery and competitive chocolate products at \$100 million for the month of September 1951. Although 39 percent above August, sales in September 1951 were 6 percent lower than sales in September of last year. Manufacturer-wholesalers and chocolate manufacturers showed declines of 6 percent and 8 percent respectively from September of last year in contrast to a 2 percent increase reflected in manufacturer-retailers' sales.

The average wholesale price of confectionery and competitive chocolate products continued above last year, as indicated by reports from 115 manufacturers reporting poundage and dollar value for September of both years. Dollar value of sales of these 115 establishments were down 5 percent from September of last year compared with a sharper decline of 11 percent in poundage. For the year to date these same establishments reported a decrease of 4 percent in poundage sales compared with a rise of 6 percent in dollar value.

Preliminary figures for October indicate little change from October of last year in total dollar value of confectionery manufacturers' sales. Poundage sales in total were down only 4 per cent. The increases, in terms of poundage and dollar value of sales, of 11 percent and 14 percent respectively, reported by package goods houses, were offset by decreases of 14 percent in terms of poundage and 13 percent in terms of dollar value reported by general line houses.

# News of Associations

- The Western Confectionery Salesmen's Association held its 37th annual convention at the LaSalle Hotel, Chicago, December 6-7.



Ralph W. Unger, Los Angeles candy broker, recently elected president of the Western Confectionery Salesmen's Association.

During the business sessions it was decided to shelve the proposed plan to amalgamate with the National Confectionery Salesmen's Association.

The following officers were elected for the new

year: Ralph W. Unger, Los Angeles, California, was elected president. Mr. Unger is a prominent candy broker of the Pacific Coast. Sydney Hoffman, Jr., of S. Z. Hoffman Associates, Chicago, was elected 1st vice president. George F. Murphy, of Williamsville, N. Y., was elected 2nd vice president. Warren B. Durgin, Oak Park, Ill., representing Ludens, Inc., was re-elected secretary-treasurer.

It was noted at the convention that the association still has four charter members on its rolls. They are: Johnny Murphy, of Chicago; Johnny Poole, of Buffalo, N. Y.; Harry Lind, of Chicago; and Martin D. Adelfinger, of Monrovia, Calif., re-elected.

Various social events highlighted the meeting. The annual Stag Party was held on the evening of the opening day, while the ladies were entertained at the Kungsholm restaurant in Chicago.

• Frank Duffy, representative of the George A. Kiepe & Sons organization in Northern California, was elected president and director of the Golden West Candy Club at the recent annual dinner. Ben Crouch of Circus Foods was elected vice president, Edward Riffle of Gene Alcorn & Company, treasurer. Other directors include Ray McGurk, A. S. Jaffe Company; Herbert McLean, New England Confectionery Company, and Robert Sheridan, Thomas J. Sheridan Company.



155 GREAT ARROW AVE.  
BUFFALO 7, N. Y.  
VI. 5225

MERCKENS CHOCOLATE COMPANY, INC.  
*Manufacturers of Chocolate and Cocoa*

*Have Confidence in the Chocolate Coating you buy*

BRANCHES AND WAREHOUSE STOCKS IN  
BOSTON, NEW YORK, CHICAGO, LOS ANGELES, OAKLAND, SALT LAKE CITY, SEATTLE

• The Association of Manufacturers of Confectionery and Chocolate will salute Charles R. Adelson, of the Delson Candy Company, as Man of the Year at the annual testimonial dinner, January 9, at



Charles R. Adelson, selected as Man of the Year by The Association of Manufacturers of Confectionery and Chocolate.

the Waldorf-Astoria Starlight Roof. Delson was selected for the honor as "a man who, for more than a quarter of a century, has devoted his tireless and unselfish efforts for our association."

• The National Candy Wholesalers Association is accepting advance registrations for the 1952 convention and confectionery exposition, which will be held at the Palmer House, Chicago, May 18-21. General mailing of the official reservation forms is presently being made.

Layout on the exhibit space may be secured by writing the Washington headquarters of the NCWA at 1424 K St., N. W. Priority on the space is being given to NCWA associate members and exhibitors of previous years.

• Confectionery trade publishers, along with all other publishers of business and trade magazines, were invited to attend a meeting, December 14th, with Charles E. Wilson, director of the Office of Defense Mobilization, to discuss various aspects of defense mobilization. The meeting was held in Washington, D.C. Primary points for discussion were the ways in which the various publications could cooperate in the defense program.

**Milprint** INC.  
PACKAGING MATERIALS  
LITHOGRAPHY & PRINTING

GENERAL OFFICES: MILWAUKEE, WISCONSIN  
SALES OFFICES IN ALL PRINCIPAL CITIES

TRY IT NOW!

**B.B.** GOLDEN MILK CHOCOLATE  
...an economical coating of exceptionally fine flavor.

BLUMENTHAL BROTHERS Since 1900  
COATINGS • LIQUORS • COCOAS  
Margaret & James Sts., Phila. 37, Pa.

# Confectionery Brokers

## New England States

### JESSE C. LESSE CO.

Confectionery  
Office and Sales Room  
161 Massachusetts Ave.  
**BOSTON 15, MASS.**  
Territory: New England

## Middle Atlantic States

### JAMES A. BRADY CO.

1018 Monsey Avenue  
**SCRANTON 9, PENN.**  
Phone 2-8658  
Concentrated coverage of the candy and food trade in N. E. Penna. "The Anthracite"

### ARTHUR M. CROW & CO.

407 Commonwealth Annex Bldg.  
**PITTSBURGH 22, PA.**  
Cover cont. & groc. jobbers, chains,  
dept. stores, food dists.  
W. Pa., W. Va., & E. Ohio

### JACK HAAZ

6720 Sprague St.  
**PHILADELPHIA 19, PA.**  
Telephone: Germantown 8-7593  
Territory: Pennsylvania,  
N. J., Balt., Wash.

### HERBERT M. SMITH

318 Palmer Drive  
**NO. SYRACUSE, NEW YORK**  
Territory: New York State

### IRVING S. ZAMORE

2608 Belmar Place  
**SWISSVALE, PITTSBURGH 18, PA.**  
29 Years Experience  
Territory: Pennsylvania, excluding city of Philadelphia

## South Atlantic States

### JIM CHAMBERS

Candy Broker  
84 Peachtree Street  
**ATLANTA 3, GEORGIA**  
Territory: Ga., Ala., and Fla.

### WALTER C. MCGILL

Candy Specialties—Jobbers only  
Box 912, Lynchburg, Va.  
Territory: Virginia, No. & So. Carolina

### WM. E. HARRELSON

Candy & Allied Lines  
5308 Tuckahoe Ave.—Phone 44280  
**RICHMOND 21, VIRGINIA**  
Territory: W. Va., Va., N. & S. Car.

## South Atlantic States (cont'd)

### ROY E. RANDALL CO.

Manufacturers' Representative  
P. O. Box 605—Phone 7590  
**COLUMBIA 1, SO. CAROLINA**  
Territory: No. & So. Carolina  
Over 25 years in area

### BUSKELL BROKERAGE CO.

1135 East Front Street  
**RICHLANDS, VA.**  
Contact Wholesale Groceries, Candy Jobbers and National Chains  
Territory: Va., W. Va., Eastern Tenn., and Eastern Kentucky

### W. M. (BILL) WALLACE

Candy and Specialty Items  
P. O. Box 472—111 Rutland Bldg.  
**DECATUR, GEORGIA**  
Territory: Ga. & Fla.  
Thorough Coverage

### SAMUEL SMITH

2500 Patterson Ave. Phone 22318  
Manufacturers' Representative  
**WINSTON-SALEM 4, N. CAROLINA**  
Territory: Virginia, N. Carolina, S. Carolina

## East No. Central States

### G. W. McDERMOTT

100 North Raymond St.—Phone 382  
**MARINETTE, WISCONSIN**  
Territory: Wisc. & Upper Mich.—covered every five weeks

### ROGER ETTLINGER

Phone Townsend 8-5369  
16525 Woodward Ave.  
**DETROIT 3, MICHIGAN**  
Territory: Entire state of Michigan

### BERNARD B. HIRSCH

1012 N. 3rd St.  
**MILWAUKEE 3, WISCONSIN**  
Territory: Wis., Ia., Ill. (excluding Chicago) Mich. (Upper Penn.)

### HARRY KISSENGER

Candy—Novelties—Specialties  
3846 McCormick Ave.  
Phone Brookfield 9891  
Chicago suburb  
**HOLLYWOOD, ILLINOIS**  
Territory: Ohio, Mich., & Ind.

# Confectionery Brokers (Cont'd)

## East No. Central States (cont'd)

**W. C. TREMEAR & SON**  
824 No. Pennsylvania St.  
**INDIANAPOLIS 4, IND.**  
Territory: Indiana, Except extreme North.

**IRWIN R. TUCKER COMPANY, INC.**  
308 W. Washington Street  
**CHICAGO 6, ILLINOIS**  
Complete Coverage of Chicago Market

**W. C. TUGAW**  
Manufacturers Representative  
1801 No. Central Park  
**Chicago 47, Illinois**  
Covering Metropolitan Chicago

**H. K. BEALL & CO.**  
308 W. Washington St.  
**CHICAGO 6, ILLINOIS**  
Phones RANDolph 1618-1628  
Territory: Illinois, Indiana, Wisconsin,  
25 years in the Candy Business

**ARTHUR H. SCHMIDT CO**  
815 ErieSide Ave.  
**CLEVELAND 14, OHIO**  
Terr: Ohio. Member Nat'l. Conf. Salesmen Ass'n. Buckeye Candy Club

## East So. Central States

**R. HENRY TAYLOR**  
Candy Broker  
Box 1456—Phone 4-2763  
**LEXINGTON, KENTUCKY**  
Territory: Kentucky and Tennessee

**A. C. BURNETT COMPANY**  
Candy Brokers  
**HALEYVILLE, ALA.**  
A crack team of six Southern salesmen. Ky., Tenn., Miss., Ala., Fla., Ga., S. C., N. C., Va., W. Va., Ark., La.  
If it will sell in Dixie—we can sell it.

**FELIX D. BRIGHT & SON**  
Candy Specialties  
P. O. Box 177—Phone 8-4097  
**NASHVILLE 2, TENNESSEE**  
Terr: Kentucky, Tennessee, Alabama, Mississippi, Louisiana

**J. L. FARRINGER CO.**  
**FRANKLIN, TENNESSEE**  
Established 1924  
Territory: Tenn., Ky., and W. Va.  
3 Salesmen covering territory

**AUBREY O. MAXWELL CO.**  
91 Franklin St.  
**NASHVILLE 3, TENN.**  
Manufacturers Sales Agent  
Territory: Middle Tennessee

**HURD-MORELAND CO.**  
**MORELAND, KENTUCKY**  
Sales Representation Candy bars, Specialties  
Terr: Kentucky, East Tennessee

## West No. Central States

**ELMER J. EDWARDS**  
**CANDY BROKERAGE**  
5352 31st Ave. So.  
**MINNEAPOLIS 17, MINN.**  
Phone: Pa. 7659

Terr: Minn., N. & S. Dak.—Special attention given to Twin City trade

**GRIFFITHS SALES COMPANY**  
725 Clark Ave.—Phone GA. 4979

**SAINT LOUIS 2, MISSOURI**  
We specialize in candy and novelties.  
Terr: Mo., Ill., and Kan.

## West So. Central States

**JAMES A. WEAR & SON**  
P. O. Box 27  
**BALLINGER, TEXAS**  
Personal Representation  
Territory: Texas

**WM. E. MIRACLE COMPANY**  
301 No. Market St.  
**DALLAS, TEXAS**  
Territory: Texas & Oklahoma

## Mountain States

**CAMERON SALES COMPANY**  
3000 Monaco Parkway  
Denver, Colo.  
Dexter 0881

Candy & Allied lines. More than ten years coverage of Colo., Wyoming, Mont., Idaho & Utah

**MAYCOCK BROKERAGE CO.**  
573 West 2nd South  
**SALT LAKE CITY, UTAH**

An eight man organization representing manufacturers for 76 confectionery, tobacco, drug and grocery jobbers in Utah-Idaho territory.

**JERRY HIRSCH**  
Manufacturers' Representative  
Candy and Specialty Items  
4111 E. 4th St.

**TUCSON, ARIZONA**  
Territory: Arizona, New Mexico & El Paso, Texas

**G & Z BROKERAGE COMPANY**  
New Mexico—Arizona El Paso County Texas  
P. O. Box 227 ALBUQUERQUE N. Mex.

Personal service to 183 jobbers, super-markets and department stores. Backed by 26 years experience in the confectionery field. We call on every account personally every six weeks. Candy is our business.

**KAISER MICHAEL**  
Broker

Manufacturers' Representative  
"World's Finest Candies"  
911 South Richmond Ave.

**ALBUQUERQUE, NEW MEXICO**  
Terr: New Mexico, Arizona & El Paso, Texas area

# Supply Field News

• Roger Lowell Putnam, president of Package Machinery Co., has been named director of the Economic Stabilization Agency, succeeding Eric John-



Roger Lowell Putnam, president of Package Machinery Co., recently named director of the Economic Stabilization Agency.

ston. In this capacity he will have over-all control of the offices of wage and price administration, and work directly under the Office of Defense Mobilization. Mr. Putnam was formerly Mayor of Springfield, Mass., for three terms.

• Walter Baker Chocolate and Cocoa Division of General Foods Corp. has appointed Edward H. Smythe as sales and advertising manager of grocery store products. He succeeds Andrew C. Quale,

*Buy with Confidence from FUNSTEN*

**FUNSTEN**

Specially Selected for Flavor and Size

**PECANS of Quality**

FOR OVER 50 YEARS

R.E. Funsten Co. 1515 Delmar, St. Louis 3, Mo.

who was recently advanced to sales manager for bulk products. Mr. Smythe was formerly with Rockwood & Co., and Henry Heide.

• Nestle's Chocolate Company has announced two sales executive changes. Thomas F. Corrigan, formerly sales manager, is now manager of coating and bulk cocoa sales. In this capacity he is suc-



Thomas F. Corrigan

John Fairgrieve

ceding M. H. Saxe, vice president of the company, who is retiring in conformity with the company's retirement policy.

John Fairgrieve has been promoted from assistant sales manager to fill the vacancy left by Mr. Corrigan's appointment. He was formerly in charge of the Chicago headquarters.

• Hugo Pulver, vice president of H. Kohnstamm & Company, died Christmas day in a Chicago hospital. He leaves his widow, Florence; a son, Robert H.; and two grandchildren and a brother Justin who is also associated with the Company. Mr. Pulver had been associated with the Company for many years and was well known to the confectionery industry.

## Confectionery Brokers (Cont'd)

### Pacific States

#### CARTER & CARTER

Confectionery Mfr's Agents  
Established with Industry since 1901  
91 Connecticut St.  
Phone: Main 7852

#### SEATTLE, WASHINGTON

Terr: Wash., Ore., Utah, Idaho,  
Mont., Nev., Wyo.

#### L. LIBERMAN

#### SEATTLE 22, WASHINGTON

Manufacturers' Representative  
1705 Belmont Avenue  
Terr: Wash., Ore., Mont., Ida.,  
Utah, Wyo.

#### GEORGE R. STEVENSON CO.

Terminal Sales Building

#### SEATTLE, WASHINGTON

Territory: Wash., Ore., Ida., Mont.  
Over 20 years in this area.

#### MALCOLM S. CLARK CO.

1487½ Valencia St.  
No. Cal., Nev., & Hawaii

#### SAN FRANCISCO 10, CALIF.

923 E. Third St.—Southern California

#### LOS ANGELES 13, CALIF.

Terminal Sales Bldg.  
Wash., N. Idaho  
SEATTLE 1, WASH.

903 Park Road  
Ariz., New Mex., W. Texas

#### EL PASO, TEXAS

#### RALPH W. UNGER

923 East 3rd St.

Phone: Trinity 8282

#### LOS ANGELES, CALIFORNIA

Terr.: Calif., Ariz., N. Mex., Hawaiian Islands

#### HARRY N. NELSON CO.

112 Market St.

#### SAN FRANCISCO 11, CALIF.

Established 1906

Sell Wholesale Trade Only

Terr: Eleven Western States

#### GENE ALCORN & CO.

1340 E. 6th Street

#### LOS ANGELES 21, CALIFORNIA

383 Brannan Street

#### SAN FRANCISCO 7, CALIFORNIA

Territory: State of California

## It Costs Less To Operate Your Equipment Without Scale!



RECORDS show you invite higher costs when you allow scale to accumulate in steam-jacketed cooking kettles, depositors, mixers, slab tables and similar units. But you don't have to put up with scale especially since descaling can now be accomplished so easily and economically with Oakite Compound No. 32.

Easy to use, this inhibited acid-type descalant exerts fast, scale-dissolving action . . . takes off the scale without damaging the metal underneath. The special inhibitor of Oakite Compound No. 32 protects the metal from harm. Write to Oakite Products, Inc., 36C Thames St., N. Y. 6, N. Y. for facts—FREE!

SPECIALIZED INDUSTRIAL CLEANING  
**OAKITE**  
MADE IN U.S.A. © 1952 OAKITE

Technical Service Representatives in Principal Cities of U. S. & Canada

## The MANUFACTURING CONFECTIONER'S

# Clearing House



### POSITION WANTED

**YOUNG SWISS CHOCOLATE MAKER** specializing in confectionery, little chocolates, dragees, biscuits, Wafern, Zwiebach, etc., seeks situation in a first quality chocolate factory in the U.S.A. or South America. Best qualifications. Speaking English, German, French, Italian. Box No. 12113 **THE MANUFACTURING CONFECTIONER**.

### CANDY FOREMAN or SUPERINTENDANT

Eighteen years experience in all kinds of candies, modern machinery. Specialized in chocolate and hard candy production. Knows how to handle help efficiently, has set up plants, excellent recommendations. Box 912, **The MANUFACTURING CONFECTIONER**.

**CANDY MAKER:** 35 years experience looking for a position with all 'round pan work, also chocolate pan work, also chewing gum, jaw breakers, etc. Am holding position. Box No. 11115 **The MANUFACTURING CONFECTIONER**.

**ALL-ROUND CANDYMAKER:** retail or wholesale desires work at once. Box 816, **The MANUFACTURING CONFECTIONER**.

PLANT LAYOUT  
PROCESSING! SANITATION!  
CANDY PROBLEMS SOLVED!

ALFRED E. LEIGHTON  
CONSULTING FOOD CHEMIST &  
CANDY TECHNOLOGIST  
5837 Tyndall Ave., Riverdale, N. Y. 71, N. Y.  
CANDY CRITICISM & APPRAISAL  
National and International Assignments  
Undertaken

CORRESPONDENCE INVITED  
SALVAGE CONSULTATION ADVICE

### HELP WANTED

**HELP WANTED:** All around pan man to operate department in one of West Coast's most modern plants; brand new machines—6 gassing and 2 polishing pans with refrigerated and heated air for each pan. Experience on jelly beans and burnt peanuts essential. Box No. 123 **The MANUFACTURING CONFECTIONER**.

**WANTED:** Good all-around candy maker for fine quality retail shop for year-round job. Ice cream experience helpful. Chicago suburb. Phone Talcott 3-8027 or write 33 S. Prospect Ave., Park Ridge, Ill.

### MACHINERY FOR SALE

**MACHINERY FOR SALE:** 5-foot Cream beater, complete with 5 hp motor. Good shape. First \$400.00 gets it. Candyland, Inc. Sioux City, Iowa.

### FOR SALE

- Chocolate Equipment including 1 Lauenstein Tempering Machine-Type-4 Ser. 10755, 1 Lehmann High-Speed 5 Roll Refiner, and 1 National 5 Roll Refiner.
- Enrober Lines.
- Mogul.
- Hard Candy Equipment.
- Miscellaneous Equipment.

Detailed list upon request

Write:

### Happiness Candy Stores, Inc.

466 North Division St.  
Buffalo 4, New York

### MACHINERY FOR SALE:

1 32 inch Greer Turntable  
1 24 inch Greer Turntable  
Reasonable price and in good condition.  
F. B. Washburn Candy Corp., Brockton 09, Mass.

**MACHINERY FOR SALE:** Hand printer. Good shape. First \$35.00 gets it. Candyland, Inc. Sioux City, Iowa.

**MACHINERY FOR SALE:** Wood starch buck without motor. Was in excellent shape when taken out of service. First \$300.00 gets it. Candyland, Inc., Sioux City, Iowa.

**MACHINERY FOR SALE:** Power printer, complete with motor. A-1 shape. First \$250.00 gets it. Candyland, Inc., Sioux City, Iowa.

**FOR SALE:** 1—8 inch Universal chocolate coating machine in very good condition. Box No. 125, **The MANUFACTURING CONFECTIONER**.

**FOR SALE:** Werner Automatic Ball Machine; Savage large A.D. mint cutter. Racine Model M. Die Pop. Simplex gas Vacuum cooker. Box No. 124 **The MANUFACTURING CONFECTIONER**.

**MACHINERY FOR SALE:** 2/100 lb. National Chocolate Melting kettles motorized, in very good condition. \$175.00 each. Box No. 121 **The MANUFACTURING CONFECTIONER**.

**PLANT FOR SALE:** a well equiped candy plant of moderate size in eastern part of Mass. can be purchased at a reasonable price, plant is now in operation. Contact Jack Green, 33 Central Wharf, Boston Mass. Hu 2-6989.

**FOR SALE:** Candy Factory, medium sized. Old established, well-equipped. Full information on request. Write Matzger Chocolate Co., 780 Harrison St. San Francisco, California.

### MACHINERY WANTED

**WANTED:** Batch roller, candy puller, cooling slabs. Model K Kiss wrapping machines, forced draft gas furnace for 27" candy pans. Box No. 1219, **The MANUFACTURING CONFECTIONER**.

### SALES LINES WANTED

**LINES WANTED:** Broker covering Pennsylvania excluding Philadelphia, open for line or specialty items with volume sales potential. Call on jobbers, chains, super markets and vendors. Over 25 years experience, large personal following with trade. Box No. 1215, **The MANUFACTURING CONFECTIONER**.

### REPRESENTATIVES WANTED

**SALES OPPORTUNITY:** Territories now open to salesmen acquainted with manufacturing confections to sell printed candy wrappers, printed and unprinted wax papers, cellophane and paper mounted foil. Commission basis. Write experience and background. Box No. 122 **The MANUFACTURING CONFECTIONER**.

### WE BUY & SELL

ODD LOTS • OVER RUNS • SURPLUS

"Cellophane"  
BAGS

SHEETS • ROLLS • SHREDDINGS

Cellophane rolls in either boxes 100 ft. or more

ALSO MADE OF OTHER CELLULOSE FILM

Wax - Glassine Bags, Sheets & Rolls

Tying Ribbons—All Colors & Widths

Scotch Tape Clear & Colors

Diamond "Cellophane" Products

Harry L. Diamond Robert I. Brown

"At Your Service"

74 E. 29th St. Chicago 16, Illinois

National  
arized, in  
ach. Box  
CONFE

ed candy  
n part of  
sonable  
. Contact  
Boston

im sized.  
Full in-  
Matzger  
St. San

ller, cool-  
ping mo-  
for 22"  
MANU-

ED

now open  
manufac-  
d candy  
ed wax  
mounted  
experience  
e MANU-

CLL

URPLUS

e

DINGS  
or more  
FILM  
Rolls  
pe  
olors  
oducts  
Brown  
Illinois

CTIONER

*One of America's Most Modern and Complete Candy Plants to be Sold at*

# PUBLIC AUCTION

**WED., JANUARY 16th, 1952 10 A. M.**

*And continuing the Following Day if Necessary  
ON THE PREMISES OF*

## **NUTRINE CANDY CO.**

**413-425 W. Erie St.**

**CHICAGO, ILL.**

**Modern, Top Quality, High Production Confectionery Machinery and Equipment—In Excess of \$1,250,000.00 Replacement Value—to be Sold Piece by Piece Only . . . for Immediate Delivery to the Highest Bidders for Cash!**

**MOGULS • DEPOSITORS • CLEANERS • DRYERS  
ENROBERS • MELTERS • COOKERS • KETTLES • SANDERS  
REVOLVING PANS • BEATERS • MIXERS • WRAPPING MACHINES  
MATERIAL HANDLING, SHOP AND LABORATORY EQUIPMENT  
& UTENSILS**

**NOTE: Production and sales of Nutrine Candy Co. products, as well as all other operations of the company, will continue without interruption and will be maintained and conducted by the Chase Candy Co., of St. Louis, Mo.**

**Illustrated Descriptive Circular Mailed on Request—Wire or Write**

## **SAMUEL L. WINTERNITZ & CO.**

**Auctioneers • Liquidators • Appraisers**

**FIRST NATIONAL BANK BLDG.  
CHICAGO 3, ILL.**

**NATIONAL BANK BUILDING  
DETROIT 26, MICH.**

## Confectionately Yours

While other squirrels scrabble around hoarding acorns for a hard winter or eking out a bare subsistence in the park, a certain squirrel in St. Louis wallows in wealths of goodies.

It has adopted the Stoll Candy Co. and goes there almost every day for free lunch. For such ingenuity it is rewarded with shelled peanuts and all the chocolate covered marshmallows it can eat—which is plenty.

"It shows up and runs up the screen door, squeaking for a chocolate covered marshmallow," said Albert Stoll, owner of the firm. "It used to go to the back door, but now comes around front and demands to see the manager."

\* \* \*

A \$10,000 damage suit in Richmond, Va., recently choked on a cough drop.

The judge ordered a mistrial after the plaintiff offered a cough drop to a juror who was having a coughing spell.

## CONVEYORS

Corrigan bulk dry sugar handling and storage systems convey sugar from unloading point to storage and from storage to production.

*Improve production facilities  
Lower operation costs*

**J. C. CORRIGAN CO. INC.**

41 Norwood St., Boston 22, Mass.

**RIBBONS**  
for your *Candies*

Satin • Moires • Taffeta  
Gros-Grain • Rib-o-nit  
Rayon and Chiffon

**R.C.TAFT CO.**

111 NORTH CANAL STREET  
CHICAGO 6, ILLINOIS



## INDEX

Abar Plastics Company .....	49	Kohnstamm & Co., Inc., H. ....	1
Allmetal Chocolate Mould Co. ....	Nov. '51	Lamb O'Lakes Creameries, Inc. ....	Sept. '51
Ambrosia Chocolate Co. ....	50	Lehmann Company, Inc. J. M. ....	Dec. '51
American Food Laboratories, Inc. ....	Dec. '51	Lynch Corp., Package	
Anheuser-Busch, Inc. ....	Nov. '51	Machine Division .....	31
Baker Div., Franklin General		Magnus, Mabee & Reynard, Inc. Nov. '51	
Foods Corp. ....	Dec. '51	N. Markovits .....	Dec. '51
Baker Chocolate and Cocoa, Walter		Matthias Paper Co. ....	45
Div. of General Foods Corp. ....	13	Merckens Chocolate Co., Inc. ....	52
Baywood Manufacturing Co., Inc. ....	34	Mill River Tool Co. ....	37
Blumenthal Bros. ....	53	Milprint, Inc. ....	53
Bramigk Co. Ltd. ....	32	National Aniline Div. Allied	
Bramley Machinery Corp. ....	Nov. '51	Chemical & Dye Corp. ....	Oct. '51
Burke Products Company, Inc. ....	42	National Equipment Corp. ....	Sept. '51
Burrell Belting Co. ....	30	National Sugar Refining Co., The .....	Dec. '51
California Almond Growers Exchange ..	8	Nestle's Chocolate Company, Inc. ....	Dec. '51
California Fruit Growers Exchange ..	12	Neumann-Buslee & Wolfe, Inc. ....	50
Wm. A. Camp Co. ....	Dec. '51	Norda Essential Oil & Chemical	
Carle & Montanari, s.c. ....	Dec. '51	Co., Inc. ....	4th Cover
Chocolate Spraying Co. ....	28	Oakite Products, Inc. ....	55
Cincinnati Aluminum Mold Co. ....	Dec. '51	Olive Can Company .....	41
Clinton Foods Inc. ....	9	Package Machinery Company .....	33
Confection Machine Sales Co. ....	Dec. '51	Penick & Ford, Ltd., Inc. ....	55
Cooper Paper Box Corp. ....	49	Pfizer & Co., Inc., Chas. ....	55
Corn Products Refining Co., Inc. ....	Oct. '51	Pitt & Sons Co., The C. M. ....	Dec. '51
Corrigan Co., Inc., J. C. ....	38	Polak's Fruital Works, Inc. ....	Dec. '51
Currie Manufacturing Co. ....	33, 36	Racine Confectioners' Machinery	
J. H. Day Company .....	June '51	Co. ....	27
Diamond Cellophane Products .....	56	Refined Syrups, & Sugars, Inc. ....	Dec. '51
Dodge & Olcott, Inc. ....	11	Riegel Paper Corp. ....	Dec. '51
Durkee Famous Foods		Savage Bros. Co. ....	23
Div. of Glidden Co. ....	Nov. '51	Savage Co., R. E. ....	23
Economy Equipment Co. ....	33	Sheffman, John .....	26, 28
Exact Weight Scale Co. ....	34	Shellmar Products Corp. ....	Dec. '51
Ferbo Co. ....	44	Solvay Sales Division, Allied	
Filtrol Corp. ....	Dec. '51	Chemical & Dye Corp. ....	Dec. '51
Florasynth Laboratories, Inc. ....	June '51	Spears Company .....	44
Fritzsche Bros., Inc. ....	4	Staley Mig. Co., A. E. ....	Dec. '51
R. E. Funsten Co. ....	54	Standard Casing Co., Inc., The .....	46
Gair & Co., Inc., Robert .....	40	Wm. J. Stange Co. ....	10
General Mills, Inc. ....	Nov. '51	Sterwin Chemicals, Inc. ....	2
Giveaudan Flavors, Inc. ....	Sept. '51	Sweetman, Inc., Geo. H. ....	Nov. '51
Glidden Company .....	Nov. '51	Tait Co., R. C. ....	58
Groen Mig. Co. ....	35	Torre Products Co., Inc. ....	Nov. '51
Greer Co., J. W. ....	Dec. '51	Union Confectionery Equipment	
Haensel-Junior Machines .....	36	Co. ....	Dec. '51
Hayssen Mig. Co. ....	40	Union Starch & Refining Co. ....	Dec. '51
Heekin Can Co., The .....	Dec. '51	Vacuum Candy Machinery Co. ....	27
Heller Candy Co. ....	51	Van Ameringen-Haebler, Inc. ....	3
Hooton Chocolate Co., The .....	Oct. '51	Voss Belting & Specialty Co. ....	Sept. '51
Hubinger Co. ....	Nov. '51	W-E-R Ribbon Corp. ....	44
Hudson-Sharp Machine Co. ....	28	Werner & Sons, Inc., John ....	30, 37
Ideal Wrapping Machine Co. ....	26	Wilbur Suchard Chocolate Co., Inc. ....	46
Kiwi Coders Corp. ....	46	Samuel L. Winternitz .....	57

**we've "squeezed" all the water out of citric acid!**



# buy CITRIC ACID ANHYDROUS

*and Save the cost of shipping and handling a gallon of*

**water with every 100 pounds of citric acid**

There are 8.58 pounds of water of crystallization in every 100 pounds of Citric Acid U.S.P., but there is *none at all* in Pfizer's Citric Acid Anhydrous. You save 8½ pounds in shipping weight for every 100 pounds of the U.S.P. material formerly used. You can save a ton on a truckload shipment!

Pfizer Citric Acid Anhydrous is prepared by a special process developed in Pfizer's research laboratories. It cannot dry out,

and it does not absorb water. Freedom from caking makes it easy to handle, cuts waste. Its composition remains absolutely constant, insuring uniform results.

**Write for technical data**

**and prices to**

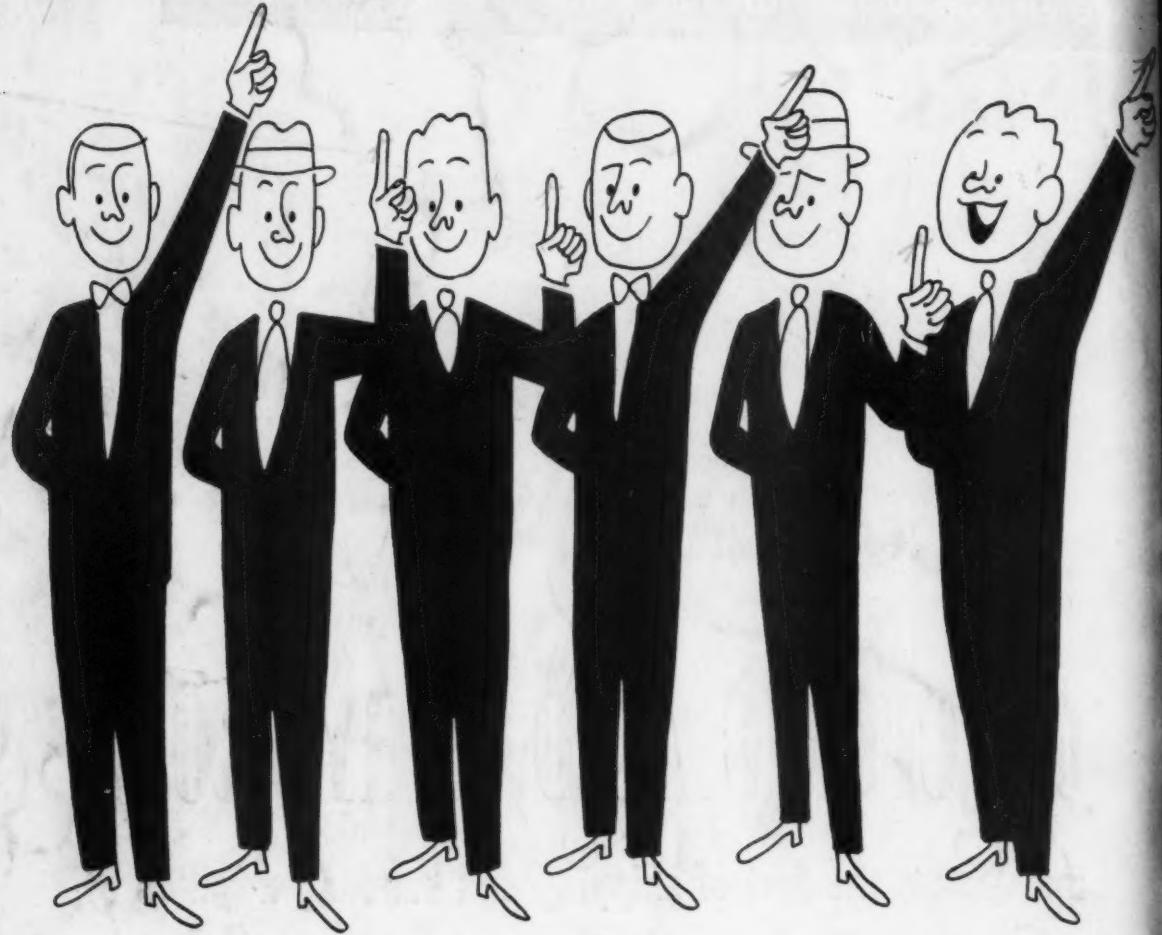
Chas. Pfizer & Co., Inc., 630 Flushing Ave., Brooklyn 6, N. Y.; 425 North Michigan Ave., Chicago 11, Ill.; 605 Third St., San Francisco 7, California.



# PFIZER

*Manufacturing Chemists for Over 100 Years*

*How to make your food product a favorite*



*Don't forget to  
Flavor it with NORDA FLAVORS*

Use Norda Flavors—true to type, true to taste. Concentrated richness makes both genuine and superior imitation Norda Flavors go farther and save money for you. Ask for free samples.

*For "A favorite to flavor it" come to*

*Norda*

ESSENTIAL OIL AND CHEMICAL COMPANY, INC.  
601 West 26th Street, New York 1, N.Y.

CHICAGO • LOS ANGELES • ST. PAUL • MONTREAL • TORONTO • HAVANA • MEXICO CITY • LONDON • PARIS

, INC.

PARIS